

SPECIAL EDUCATION TRANSITION PREDICTORS USED IN INDIANA FOR  
SECONDARY SPECIAL EDUCATION STUDENTS: FINDINGS FROM THE FIELD

A DISSERTATION SUBMITTED TO THE GRADUATE SCHOOL IN PARTIAL  
FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE

DOCTOR OF EDUCATION

BY

NIKKI S. SPRUNGER

DISSERTATION ADVISOR: MICHAEL W. HARVEY

BALL STATE UNIVERSITY

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APPROVED BY:

\_\_\_\_\_  
Michael Harvey, Committee Chairperson

\_\_\_\_\_  
Date

\_\_\_\_\_  
John Merbler, Committee Member

\_\_\_\_\_  
Date

\_\_\_\_\_  
Marilynn Quick Committee Member

\_\_\_\_\_  
Date

\_\_\_\_\_  
Charles Payne, Committee Member

\_\_\_\_\_  
Date

\_\_\_\_\_  
Robert Morris, Dean of Graduate School

\_\_\_\_\_  
Date

Ball State University

Muncie, IN

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*Dedicated to Nicholas and Nathan: May your  
educational journey be rich and rewarding.  
Your support, love, and encouragement  
enriched my journey even more.  
You are loved.  
Mom*

*To David: Thank you for your continued  
patience, love, support, and encouragement.  
You mean the world to me.*

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To my husband, David, thank you for being my biggest cheerleader, coach, and counselor.

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## **Abstract**

**DISSERTATION PROJECT:** SPECIAL EDUCATION TRANSITION PREDICTORS USED IN INDIANA FOR SECONDARY SPECIAL EDUCATION STUDENTS: FINDINGS FROM THE FIELD

**STUDENT:** Nikki S. Sprunger

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Legislation has mandated that secondary schools provide services for students with disabilities that prepare them for independent living, employment, and/or post-secondary education (Individuals with Disabilities Education Improvement Act, 2004). This study examined the perceptions of special education directors, assistant directors/program coordinators, and secondary special education teachers concerning the current knowledge, usage, and effectiveness of evidenced-based transition predictors at the high school level in the state of Indiana and the impact on post-school outcomes. The study also examined the barrier to positive post-school outcomes faced by SWD including paid employment/work experiences, inclusion in the general education setting, self-care/independent living skills, self-advocacy/self-determination skills, and parental involvement.

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## **CHAPTER 1 – OVERVIEW**

Millions of students graduate from our country's high schools each year. This is certainly a time of joy and celebration. Many students will be attending post-secondary education, while others will be entering the employment arena. However, for students with disabilities this time can be concerning. Opportunities for post-secondary education, employment, as well as community living are not as successfully accessed by individuals with disabilities as their non-disabled peers (Brolin & Gysbers, 1989; Wagner & Blackorby, 1996). These transitions are often too difficult to successfully navigate without effective programming in the secondary education arena. The federal government recognized the need for a focused concentration on transition services for students with disabilities. The Individual with Disabilities Act (IDEA, 2004) defined transition as “a coordinated set of activities for a student, designed with an outcome-oriented process, which promotes movement from school to post-school activities, including employment (including supported employment), continuing and adult education, adult services, independent living, or community participation” (IDEA, 2004). This important piece of legislation not only gave a federal definition to transition but also included specific components of transition that were needed in an individualized education plan (IEP). The IEP is to include appropriate measurable goals, necessary transition services, and by age 16, the necessary services to be implemented (IDEA, 1990). In addition, the 1997 IDEA mandated the student's course of study tied to transition services (Kohler & Field, 2003). The need to focus on post-secondary outcomes for students with disabilities has challenged educators to develop secondary curriculum which prepares students for life after high school.

Historically, persons with disabilities were not included in the day-to-day activities of the normal population. The day to day experiences and conditions for individuals with disabilities

were not rich and stimulating (Nirje, 1994). A collection of methods and experiences with persons with disabilities was grouped together by Bengt Nirje in 1969 with regards to the practical work being conducted on mentally retarded individuals in Scandinavia countries. Nirje created the normalization principle to guide all aspects of the retarded. There were eight aspects of the normalization principle that included a normal rhythm of the day, normal routine of life, normal rhythm of year, normal developmental experiences, the ability to make choices, living in a bisexual world, normal economic standards, and normal physical facilities. These principles provided a framework for the lives of the mentally retarded to approximate that of their non-disabled peers (Nirje, 1994). Nirje's concepts of normalization have been influential in disability policy and service development in the United States (Kohler & Field, 2003).

### **Conceptual Framework**

In 1983, the first generation of students with disabilities to go completely through elementary school under the provisions of Education for All Handicapped Children Act (Public Law 94-142) was preparing to enter high school. The high school students who "had preceded them had left school, and disquieting reports were surfacing in some states and communities regarding how they were faring as workers, postsecondary students, and citizens" (Wagner & Blackorby, 1996, p. 104). Graduation rates and wages were low. In addition to these issues, youth with disabilities were having problems making social adjustments (Wagner & Blackorby, 1996).

In addition, post-school outcome studies reported low graduation rates, poor employment rates, and difficulties with independent living (Bureau of Labor Statistics, U.S. Department of Labor [BLS], 2012; National Council on Disability [NCD], 2011; Newman, Wagner, Cameto, Knokey, & Shaver, 2010; Spradlin, Hiller, & Robinson, 2011; Spradlin & Hiller, 2012).

Developments in the 1980's reflected a concern for the welfare of students with disabilities. The terminology for referencing people with disabilities changed. People with disabilities were once called handicapped and/or mentally retarded. Today a more humanistic term is utilized. First and foremost they are students and next they have disabilities; hence with the term students with disabilities, person first language emerged. Other terminology was changing as well. "In addition, as career terminology subsided in the 1980's, a new term that closely resembled a career education concept was introduced" (Brolin & Gysbers, 1989, p. 155). The term that resembled career education--transition--was introduced by Madeline Will (Brolin & Gysbers, 1989). Transition is used today regarding the movement from school to adult life.

The Office of Special Education and Rehabilitative Services (OSERS), in the U. S. Department of Education, identified transition from school-to-work for students with disabilities as a federal priority in the early 1980's (Dunn, 1996; Dunn & Shumaker, 1997). The Education for All Handicapped Children Act (EHA, 1983) authorized spending for research that focused on employment and educational transition difficulties students with handicaps were having. The EHA (1983) provided federal dollars designed to focus on transition services. "This legislation authorized \$6.6 million in grants and contracts to be spent annually by OSERS to improve and strengthen education, training, and related services" (Brolin & Gysbers, 1989, p. 156). During the years of 1984-1988 (Wehman, 2013b), over 500 projects were developed and implemented in an array of educational settings to assist in the transition of youth and adults with transition services (Kohler & Field, 2003). Key amendments to EHA helped expand support for the quality of programs for students with disabilities and these became codified as IDEA (Wehman, 2013a; Wehman, 2013b). Moreover, the IDEA 1990 mandated the IEP for students 16 years of age and older include specified transition components (Kohler & Field, 2003). The IDEA 1997

amendments “expanded the transition requirements regarding a student’s IEP to begin including transition services needs related to the student’s course of study when the students reaches age 14” (Kohler & Field, 2003, p. 174). This was the first time federal legislation communicated the idea that content of student’s education should be focused on his or her postschool desires (Kohler & Field, 2003). IDEA 2004 requires students with disabilities in be educated to the greatest extent possible in the general education setting (Wehman, 2013a; Wehman 2013b). Researchers have discovered students with disabilities who are included in the general education curriculum experience better post-secondary outcomes (Landmark, Ju, & Zhang, 2010).

The transition mandate of IDEA initiated a variety of transition models and theories for secondary schools. Indiana implements the requirements of IDEA (2004) through Article 7, which is part of Indiana Administrative Code (IAC). Article 7 contains Indiana’s special education rules. There are 16 rules addressing definitions, programs, personnel, disability category, eligibility requirements, case conference meetings, and other special education services and issues. It defines transition services as:

Sec. 100. (a) "Transition services" means a coordinated set of activities for a student with a disability that: (1) are designed to be within a results-oriented process that is focused on improving the academic and functional achievement of the student with a disability; (2) are incorporated into the student's transition IEP in accordance with 511 IAC 7-43-4; and (3) facilitate movement from school to post-school activities, including, but not limited to: (A) postsecondary education; (B) vocational education or training, or both; (C) integrated employment, including supported employment; (D) continuing and adult education; (E) adult services; (F) independent living; or (G) community participation. (b) The coordinated set of activities described in subsection (a) must be based on the individual student's needs, taking into

account the student's strengths, preferences, and interests, and include the following: (1) Instruction. (2) Related services. (3) Community experiences. (4) The development of employment and other post-school adult living objectives. (5) If appropriate: (A) acquisition of daily living skills; and (B) provision of a functional vocational evaluation. (c) Transition services for students with disabilities may be: (1) special education, if provided as specially designed instruction; or (2) a related service, if required to assist a student with a disability to benefit from special education (Indiana Department of Education [IDOE], 2010, p. 22).

### **Models and Theory of Transition**

Madeline Will, Assistant Secretary for the Office Special Education and Rehabilitative Services (OSERS), wrote *Bridges from School to Working Life* (1984) about assisting students with disabilities with transition to the adult world. The paper delineated concepts and policies that analyzed transition issues and programming. Will describes transitions as an important part of life. These transition periods include high school, the point of graduation, additional post-secondary education and/or adult services, and the initial years in employment. Will further explained that transition is a bridge between school and the opportunities and risks of adult life. Furthermore, Will emphasized “any bridge requires both a solid span and secure foundation at either end” (Will, 1984 p. 1). Thus, Will detailed the importance of the solid plan developed at the secondary level to assist the student from school to work. Will emphasized the traditional view of career education was insufficient for students with disabilities. The services and experiences leading to employment varied extensively and needed special linking services (Will, 1984).



Andrew Halpern developed a broader definition of transition in 1985. The definition states:

Transition refers to a change in status from behaving primarily as a student to assuming emergent adult roles in the community. These roles include employment, participating in post-secondary education, maintaining a home, becoming appropriately involved in the community, and experiencing satisfactory personal and social relationships. The process of enhancing transition involves the participation and coordination of school programs, adult service agencies, and natural supports within the community. The foundations of transition should be laid during the elementary and middle school years, guided by the broad concept of career development. Transition planning should begin no later than age 14, and students should be encouraged, to the full extent of their capabilities, to assume a maximum amount of responsibility for such planning (Cobb & Alwell, 2009, p. 116).

He focused attention on successful community living as a major goal of transition. He emphasized employment services, yet focused on additional elements of the transition process related to broader adult life (Baer, Flexer, & Dennis, 2007; Cushing & Parker-Katz, 2012).

Furthermore, the Council for Exceptional Children's (CEC) Division of Career Development and Transition (DCDT) adopted Halpern's definition. His definition provided "important theoretical and practical background for the transition language that appeared in the amendments to the IDEA in 1997 and 2004" (Cobb & Alwell, 2009, p. 71).

In 1992, Donn Brolin developed the Life Centered Career Education (LCCE) approach, to meet the transition needs of students with disabilities. This was a functional approach with the curriculum being designed to facilitate development of the important skills needed to function in the world of work. It focused on paid and unpaid employment. There were

three major domains: daily living, personal-social, and occupational guidance and preparation. Within these curriculum areas, there are 22 competencies that include financial skills, self-awareness skills, independent living, and occupational skills. This curriculum was designed to address the skills needed to become a more effective individual (Brolin, 1992).

The original LCCE curriculum has been expanded since its inception in 1992. Presently it contains a 200-item knowledge battery. It contains both pre and post assessments in addition to a performance battery. The curriculum focuses on practical life skills and the unique individual strengths of the student (Brolin, 1992).

Another approach to meeting the transition needs of students is the person-centered approach. This approach uses existing student information in the assessment process. Sitlington, Clark, and Kolstoe (2000) provided information on how to use different techniques in the assessment process to guide the transition process. The integration of the gathered information provides continual assessment for the needs of students to transition to post-secondary education, employment, and community living. The techniques are divided into six categories: analysis of background information, interviews/questionnaires, psychometric instruments, work samples, curriculum-based assessment techniques, and situational assessment (Sitlington & Payne, 2004).

Kohler (1996) developed the Taxonomy for Transition Programming. This transition model provided a comprehensive organization for transition-focused education. This places transition services into five categories: student focused planning, student development, interagency and interdisciplinary collaboration, family involvement, and program structure and attributes (Kohler, 1996). These five categories represented concrete strategies for transition and provided a focus on adult outcomes for students with disabilities. This provided a shift from disability-focused programming to service delivery outcomes based on student needs and desires

(Kohler & Field, 2003). This model forms the basis of transition services in public schools.

Kohler's Taxonomy is widely accepted as a framework for secondary transition programs (Test et al., 2009a).

### **Transition Studies**

The United States Department of Education (USDOE) sponsored two longitudinal research studies that were 15 years apart. The National Longitudinal Transition Study (NLTS) was the first nationally representative study to create information regarding secondary youth with disabilities in 1985. In 2000, USDOE commissioned the National Longitudinal Transition Study-2 (NLTS2) to produce updated information about secondary youth with disabilities. Both reports focused on youth with disabilities that had been out of high school for up to four years. NLTS was a six year study of students with disabilities who were in grade 7 or above and between 13 and 21 years of age. NLTS2 was a 10-year study that included the characteristics, experiences, and outcomes of youth with disabilities who were 13 to 16 years old and receiving special education services (Newman, Wagner, Cameto, Knokey, and Shaver, 2010).

Results from NLTS indicated high dropout rates. For example, 30% of students with disabilities dropped out of high school and 8% dropped out before entering high school. The average age for a drop out was 18 years; and on average, these students had earned less than half of the necessary credits to graduate. Rates of post-secondary education for students with disabilities were also low. Only 27% of students with disabilities had been enrolled in a post-secondary school three to five years after graduation as compared to 68% of their general education peers. Employment success was linked to students with disabilities taking a concentration of at least four vocational courses. Additionally, students with disabilities tended to be poor financially (Wagner & Blackorby, 1996).

Finding employment is a goal of young adulthood. In addition, it is important to have employment that offers benefits, has a competitive wage, and promotes advancement. Between the years of 1990 and 2005, NLTS data indicated employment status, hours per week employed, type of job, average wages, and benefits did not significantly vary for youth with disabilities. Moreover, residential independence, marriage, and parenting did not vary significantly, nor did organized extracurricular community activities. Furthermore, one significant negative finding related to community participation should be noted between the two sets of data. The rate at which youth with disabilities out of high school up to four years were reported to have been arrested at some point increased substantially between 1990 and 2005. The arrest rate was 11 percentage points higher in 2005 than reported in 1990. This signifies the difficulty of some youth with disabilities to assimilate into independent living (Kellems & Morningstar, 2010; Lehman, Clark, Bullis, Rinkin, & Castellanos, 2002; Newman et al., 2010).

The IDEA mandates state departments of education report post-school outcomes (PSO) on students with disabilities. This information is to be reported in the annual performance report (APR) on the state's performance plan (SSP). In 2004, the Office of Special Education Programs (OSEP) funded the National Post-School Outcomes Center to assist states in the development of a system for collecting PSO data. This data is to be collected on young adults with disabilities one year after they leave secondary education (Alverson, Naranjo, Yamamoto, & Unruh, 2010).

The state of Indiana Post-High School Survey conducted a multi-stage study of youth who had individualized education programs (IEPs) and were no longer in an Indiana high school. This study was conducted to determine how many of these students had enrolled in post-secondary education or were employed. This study was done to comply with the federal mandate, Indicator 14. The study found that 32.8% of youth with disabilities had enrolled in

higher education, 23.9% were competitively employed, 10.8% were enrolled in some other training, and 8.9% had some employment (Spradlin et al., 2011). A follow-up study was conducted in 2012. These results indicated that 33.9% were enrolled in higher education, 28.1% were competitively employed, 8.9% were enrolled in some other form of education or training, and 7.0% were in some other employment (Spradlin & Hiller, 2012).

### **Established Best Practice**

Best practice in transition services has been a focus within the field of special education since the inception of the Education for all Handicapped Children Act (EHA) Amendments 1986. Cobb and Alwell (2009) conducted a systematic review of scientifically-based research studies on transition services. These studies had three distinct viewpoints: (a) transition planning/coordinating interventions, (b) transition or transition-related outcomes, and (c) samples of secondary-aged youth with disabilities. Cobb and Alwell defined scientifically-based research studies as those that met recently enacted federal research standards. This included research that had applied rigorous and objective methodology, and in which the claims made were appropriate and supported by methods that had been previously employed (Cobb & Alwell, 2009).

The research revealed student-focused planning holds great promise for successful transition outcomes for students with disabilities. The findings state students need to feel that they are being listened to and that they are valued at IEP meetings. A suggestion to improve this is to have peer advocates, friends, and mentors as participants in the case conference committee (CCC). In addition, more time needs to be given to transition conferences (Cobb & Alwell 2009).

A primary concern uncovered in Cobb and Alwell (2009) research was the “lack of efficacy of special education curriculum” (p.78). Students with disabilities spent too much time

on homework catch up and greater attention needed to be given to learning “how to learn.” Furthermore, vocational training should include work experiences in real jobs that incorporate socialization skills. Career planning and development needs to focus on specific job skills (Cobb & Alwell, 2009).

As a broad base of transition research evolved to shape policy and build capacity, states and local education agencies needed assistance in implementing effective transition programs. The U.S. Department of Education, Office of Special Education Programs funded the National Secondary Transition Technical Assistance Center (NSTTAC, Grant #H326J050004). One of the objectives of the grant was to “identify and disseminate evidenced-based practices” (p. 116). A literature review was conducted in August 2009 by David Test et al. to identify evidenced-based best practices. These practices were categorized by Kohler’s Taxonomy for Transition Programming (1996). Several criteria had to be met in order to be included in this review. These include that the studies were:

- (a) published between 1984 and March 2008, (b) included at least one students with a disability as defined by the Individuals with Disabilities Educational Improvement Act of 2004 and Section 504 of the Rehabilitation Act of 1973 who received education services through a local education agency in a non-elementary and non-secondary school setting, inclusive of ages 11 to 22 years, and (c) included independent variable or dependent variables aligned with one of the five areas of the Taxonomy for Transition Programming (Kohler, 1996) or clearly linked to a post-secondary outcome (Test & Cook, 2012).

Overall, Test et al. (2009a) reported 32 secondary transition evidenced-based best practices. Three practices were identified to have a moderate level of evidence in the field of student-focused planning. Twenty-five practices were identified in the field of student

development and one practice identified in the field of family category. The last three practices were found in the area of program structure. No evidenced-based practices were identified in interagency collaboration (Test & Cook, 2012).

Test et al. (2009b) took the literature review one-step further. In December of 2009 a systematic review of the secondary transition correlation literature to identify was conducted to identify in-school predictors which improve secondary transition for students with disabilities in the areas of education, employment, and/or independent living. To be included in the review the study had to include: “(a) predictor variables related to a secondary transition program or practice, and (b) outcome variables related to post-school education, employment, and independent living” (Test et al., 2009b, p. 162). The criterion was met by 22 articles. Because of this review, 16 evidenced-based predictors were identified which improve post-school outcomes for students with disabilities. The predictors were: “career awareness, community experiences, exit exam requirements/high school diploma status, inclusion in general education, interagency collaboration, occupational courses, paid work experience, parental involvement, program of study, self-advocacy/self-determination, self-care/independent living, social skills, student support, transition program, vocational education, and work study” (Test et al., 2009b, p. 170).

These evidenced-based predictors were starting points for schools and educators to design successful transition programs. “These results provide the field with a springboard for creating systems change by providing practitioners information about secondary transition program characteristics that have been empirically linked to improved post-school success for students with disabilities” (Test et al., 2009b, p. 179). The research findings of Cobb and Alwell (2009) and Test et al. (2009b) have been very important to the area of transition. These reviews

provided vital information concerning the quality and effectiveness of transition practices (Landmark, Ju, & Zhang, 2010).

### **The Problem**

As federal mandates created a focused definition and concentration on the transition needs of secondary students, research and post-school follow-up studies have provided documentation of the models and techniques as well as the needs to be addressed in the area of transition. The problem in the field is implementation, with fidelity, of a curriculum which translates evidenced-based predictors of effective transition that has real life application in the secondary classroom setting. Current challenges include the need to examine instructional and service delivery to improve transition outcomes for students with disabilities. On one hand, special educators are expected to promote the concept of career and life skills training; on the other hand, they are faced with increased academic requirements and exit exams for students (Brolin & Gysbers, 1989). According to the U. S. Department of Education (2007), 28.3% of students with disabilities are dropping out of school (U.S. Department of Education, n.d., p. 81). These students are entering the workforce unprepared and unable to earn high-wage employment. The Indiana Post School Follow Up Survey (2011) further denoted youth with disabilities are underemployed. The data did not show improvement for the Indiana Post School Follow Up Survey (2012). National and state transition centers have provided technical assistance to schools in meeting the compliance needs of (a) Indicator 1, which is percent of youth with IEPs graduating from high school, (b) Indicator 2, the percent of youth with IEPs dropping out of school, (c) Indicator 13, the percent of youth aged 16 and above with an IEP that includes coordinated, measurable, annual IEP goals and transition services, and (d) Indicator 14, which is the percent of youth who had IEPs that are no longer in secondary school and who have



been competitively employed, enrolled in some type of postsecondary school, or both, within one year of leaving high school (IDOE, n.d., p.1-2).

These indicators provide needed data to determine if schools are assisting students in creating post-school opportunities. Meeting the needs of students with disabilities as well as successfully implementing evidence-based transition predictors is the present challenge. It is imperative to identify which evidence-based predictors are being utilized in secondary schools to create appropriate transition programs.

### **The Purpose**

The purpose of this study was to examine the perceptions of special education directors, their assistant directors/program coordinators, and secondary special education teachers concerning the current knowledge, usage, and effectiveness of evidenced-based transition predictors at the high school level in the state of Indiana and the impact on post-school outcomes. The study was designed to examine the barriers to positive post-school outcomes faced by SWD including paid employment/work experiences, inclusion in the general education, self-care/independent living, self-advocacy/self-determination skills, and parental involvement. Ultimately, the study was conducted to determine to what extent evidenced-based transition predictors are being utilized in high schools the state of Indiana from high school to transition secondary special education students into post-secondary education, employment, and adult life.

### **Major Research Questions**

The major research questions of this study focus on the current usage of evidenced-based transition best practice, as established through sixteen predictors identified in the literature (Test et al., 2009b), for secondary special education students in the state of Indiana as perceived by

special education directors, assistant special education directors/program coordinators, and special education teachers.

Research Questions:

- 1) What level of knowledge of evidenced-based transition predictors do directors of special education, assistant directors/program coordinators, and secondary special education teachers possess?
- 2) What evidenced-based transition predictors are utilized currently in high school settings in the state of Indiana for transition of secondary special education students as perceived by special education directors, assistant directors and/or program coordinators, and secondary special education teachers?
- 3) At what level of effectiveness are the sixteen evidenced-based transition predictors being implemented as perceived by special education directors, assistant directors and/or program coordinators, and secondary special education teachers?
- 4) What evidenced-based transition predictors are impacting post-school outcomes in high school settings in the state of Indiana for transition of secondary special education students as perceived by special education directors, assistant directors and/or program coordinators, and secondary special education teachers?
- 5) Are there differences in perception concerning the knowledge, use, and effectiveness of the transition predictors among special education directors, assistant directors and/or program coordinators, and secondary special education teachers?
- 6) What are the barriers to teaching self-advocacy/self-determination programs as perceived by special education directors, assistant directors and/or program coordinators, and secondary special education teachers?

- 7) What are the barriers for implementing paid employment/work experiences as perceived by special education directors, assistant directors and/or program coordinators, and secondary special education teachers?
- 8) What are the barriers for ensuring inclusion in the general education setting as perceived by special education directors, assistant directors and/or program coordinators, and secondary special education teachers?
- 9) What are the barriers for teaching self-care/independent living skills as perceived by special education directors, assistant directors and/or program coordinators, and secondary special education teachers?
- 10) What are the barriers for ensuring parental involvement as perceived by special education directors, assistant directors and/or program coordinators, and secondary special education teachers?

### **Significance of the Study**

Drop-out rates, low post-secondary enrollment, low employment rates, and poor adjustment to independent living have given cause for a concentrated focus on the need to improve transition services for youth with disabilities. A focused examination of evidenced-based transition predictors was needed to ensure appropriate and successful transition services were provided to students with disabilities. Furthermore, “the employment-population ratio for persons with a disability declined from 18.6 percent in 2010 to 17.8 percent in 2011” (Bureau of Labor Statistics U.S. Department of Labor [BLS], 2012, p. 1). The research conducted by Test et al. (2009b) demonstrated the need to examine the current predictors being utilized in Indiana. Follow-up studies conducted in the state of Indiana indicated only 42% of youth with disabilities were employed at or above minimum wage, only 16% were enrolled in some type of post

secondary education excluding two or four year college/university placement, and 37.6% were enrolled in a two to four year college/university (Spradlin & Hiller, 2012b).

This study was conducted to provide insight and information to special education directors, assistant directors/program coordinators, and special education teachers regarding the current use of evidenced-based transition predictors in secondary schools in Indiana.

### **Basic Assumptions**

Basic assumptions of this study were that special education directors, assistant directors/program coordinators, and special education teachers had knowledge about secondary transition and how the evidenced-based transition predictors were being used in their schools. In addition, these personnel had knowledge of Indicator 13 and Indicator 14.

Indicator 13: Percent of youth with Individualized Education Programs (IEPs) aged 16 and above with an IEP that includes appropriate measurable postsecondary goals that are annually updated and based upon an age appropriate transition assessment, transition services, including courses of study, that will reasonably enable the student to meet those postsecondary goals, and annual IEP goals related to the student's transition services needs. Indicator 14: Percent of youth who are no longer in secondary school, had IEPs in effect at the time they left school, and were: enrolled in higher education within one year of leaving high school, enrolled in higher education or competitively employed within one year of leaving high school, enrolled in higher education or in some other postsecondary education or training program; or competitively employed or in some other employment within one year of leaving high school (Indiana Department of Education [IDOE], n.d., p. 1).

Moreover, it was assumed electronic survey information material would be deliverable. Based on these assumptions, the survey instrument questions were designed to measure the perception of the predictors being utilized in special education. It was assumed the participants took the survey voluntarily. With regards to the questions, it was assumed the participants involved with the survey were knowledgeable in special education, special education terminology, had an understanding of the intent of the questions, and answered the questions correctly. This allowed honesty in the answer.

### **Definition of Terms**

*Career awareness:* Opportunities for students to learn occupational skills, to have guidance and counseling activities to help begin developing positive attitudes about work, to begin seeing themselves as potential workers, to become aware of different kinds of jobs and their requirements, to begin developing a work personality by acquiring a unique set of abilities and needs, and to become aware of the types of work habits and behaviors needed for successful work (Brolin & Gysbers, 1989, p. 260).

*Career/technical education:* The term ‘career and technical education’ means organized educational activities that—“(A) offer a sequence of courses that—“(i) provides individuals with coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in current or emerging professions; “(ii) provides technical skill proficiency, an industry-recognized credential, a certificate, or an associate degree; and “(iii) may include prerequisite courses”(B) include competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and

knowledge of all aspects of an industry (Carl D. Perkins Vocational and Technical Education Act of 1998, 2006).

*Community experiences:* Community experiences include community-based training in non-school environments to teach students important skills such as (a) mobility in the community and transportation skills, (b) daily living skills, (c) recreational and leisure skills, and (d) workplace skills (Test & Cook, 2012, p. 34).

*Diploma:* High school diploma “means a certificate of graduation issued by the governing body of a school corporation certifying that the student has satisfied the minimum requirements for graduation from a high school of the school corporation” (Indiana General Assembly, January 2, 2013, p. 10).

*Exit exam requirements:* End of Course Assessments (often referred to as ECAs) are the standards-based assessment of students’ achievement of knowledge and skills at the end of a course. Multiple measures of assessing achievement are recommended: objective tests, essays, product, performance or portfolio assessment (Indiana Department of Education [DOE], n.d., p. 1).

*Interagency agreement/ collaboration:* “Service delivery that is fostered by interagency agreements that clearly articulates roles, responsibilities, communication strategies and other collaborative actions that enhance curriculum, program development, and service delivery” (Kohler & Field, 2003, p. 178).

*Paid employment/work experiences:* Paid employment and work experience refers to students with disabilities having a paying job during high school (Test & Cook, 2012, p. 35).

*Parental involvement:* “(23) Parent.--The term ‘parent’ means--“(A) a natural, adoptive, or foster parent of a child (unless a foster parent is prohibited by State law from serving as a parent);“(B) a guardian (but not the State if the child is a ward of the State);“(C) an individual

acting in the place of a natural or adoptive parent (including a grandparent, stepparent, or other relative) with whom the child lives, or an individual who is legally responsible for the child's welfare; or ``(D) except as used in sections 615(b)(2) and 639(a)(5), an individual assigned under either of those sections to be a surrogate parent (IDEA, 2004).

*Self-advocacy/self-determination:* As a construct, self-determination has two basic meanings: (1) the sense of the phrase as pertaining to the rights of a collective group, usually citizens of a country, to self governance; and (2) the use of the phrase as a personal construct referring to having control over one's life and destiny (Wehmeyer & Bolding, 2001, p. 371-372).

*Self-care/independent living:* Independent living instruction can include, but is not limited to: (a) leisure skills, (b) social skills, (c) self-care skills, and (d) other adaptive behavior skills (Test & Cook, 2012, p. 34).

*Social skills:* "Students with high daily living skills were more likely to have a higher quality of life (independent living) and be engaged in post-school employment" (NSTTAC, n.d., p. 5).

*Student support:* "Student support can come from a variety of sources, including friends, family, teachers, and others during high school" (Test & Cook, 2012, p. 35).

*Transition program:* The term "transition services" means a coordinated set of activities for a child with a disability that (a) designed to be within a results-oriented process, that is focused on improving the academic and functional achievement of the child with a disability to facilitate the child's movement from school to post-school activities, including postsecondary education, vocational education, integrated employment (including supported employment); continuing and adult education, adult services, independent living, or community participation; (b) is based on the individual child's needs, taking into account the child's strengths, preferences, and interests; and (c) includes instruction, related services, community experiences, the development of

employment and other post-school adult living objectives, and, if appropriate, acquisition of daily living skills and functional vocational evaluation (IDEA, 2004).

### **Summary**

The concern for transition services has been a focus of federal legislation for the past 30 years. The specific focus of transition services in 1983 brought to the forefront the importance of the legislation. Federal mandates have conceptualized the definition of transition, the age for programming, and specific components of the IEP. Models of transition have been developed at the national and state levels. The state of Indiana monitors Indicator 13 yearly to determine if schools are compliant with transition IEPs. The National Center on Secondary Education and Transition (NCSET) and the Indiana Secondary Transition Resource Center (INSTRC) has been established to help schools develop transition services for students with disabilities. The INSTRC designs and implements professional development to assist teachers with writing goals and objectives to meet the compliance guidelines set forth by the state. The center partners with schools, community organization, and families to build capacity to improve post-school outcomes for students with disabilities (Indiana Secondary Transition Resource Center [INSTRC], n.d.). Yet, students with disabilities continue to drop out of school at much higher rates than their general education peers and those students with disabilities that remain, tend to be underemployed. Transition to post-secondary education is low as are employment rates. Successful identification and implementation of evidence-based predictors is needed to develop transition services to assist students with disabilities. This study investigated the current usage and effectiveness of 16 evidenced-based transition predictors and the barriers of implementation. Given the limited research into the usage, effectiveness, and barriers of



implementation of the 16 evidenced-based transition predictors, this study will strive to provide significant information for students with disabilities in the state of Indiana.

## **CHAPTER – 2 LITERATURE REVIEW**

### **Foundation**

Federal mandates brought to the forefront the importance of transition services. The Rehabilitation Act of 1973 (The Rehabilitation Act, 1973) and The Individuals with Disabilities Education Improvement Act (1990) were federal mandates that helped define transition and the services that should be provided to implement it. The year 2010 marked the 35<sup>th</sup> anniversary of Public Law 94-142, which is now IDEA 2004. This federal law requires schools to play an active role in preparing and assisting students with disabilities with life after high school. This goal has had a far-reaching effect on the way secondary transition programs have been designed. The focus of the current research was to investigate the current usage of evidenced-based transition predictors, as established through sixteen predictors identified in the literature, for secondary special education students in the state of Indiana as perceived by special education directors, program coordinators, and special education teachers.

### **Search Methods**

Multiple steps were taken to identify research for the literature review. Methods and databases utilized to obtain literature and references for the research study included (a) Academic Search Premier, (b) EBSCOHOST, (c) ERIC database, (d) Google search, (e) dissertation abstracts, (e) Ball State Cardinal Scholar, (f) Pro-Quest, (g) one-search, (h) librarian reference services at Ball State University and Fort Wayne Public Library, (i) in library research for articles as well printed text, and (j) a search of government maintained publications and data obtained through the United States Department of Education. In addition, transition websites

were utilized: (a) <http://www.transitioncoalition.org>; (b) <http://www.nlts2.org>; and (c) <http://www.nsttac.org>. Conducted searches included the use of the following terms: transition, students with disabilities, transition services, transition outcomes, post-secondary education, college services, self-determination, and predictors for successful transition. Hundreds of articles were produced related to the topics or combination of the terms listed. Various websites were also used in the literature review. These include the Indiana Department of Education (IDOE), Office of Special Education Programs (OSEP), United States Department of Labor, and U. S. Department of Education. A total of 114 articles met search criteria and 78 were used in the study.

The research was organized by the implications of the article on the area of transition. The author reviewed the research and then determined the correct category. The major categories were: transition history, early transition studies, longitudinal studies, foundation for transition practices, transition programs and practices, assessment and transition, school to work programs, teacher education programs, transition planning process, state initiatives, and current research.

### **Transition History**

Nirje's (1969) extensive piece of research was followed up by Wolf Wolfensberger (1983) with his concept of the term normalization and his definition of the meaning. Wolfensberger was concerned people were not taking the term normalization seriously. Moreover, Wolfensberger was never satisfied with the term due to concerns that with people with disabilities were being devalued. Wolfensberger stated, "The more consistently a person is perceived and treated as being deviant, the more likely it is that s/he will conform to that expectation and will behave in ways that are socially expected of him/her--or at least not valued by society" (Wolfensberger, 2011, p. 436). Furthermore, handicapped persons have been viewed

as animals and segregated into settings much like cages. Finally, Wolfensberger stated how a person is treated by others has strong effects on the individual's behavior (Wolfensberger, 2011).

Wolfensberger created a new theory to replace the principle of normalization. The new term was social role of valorization. Wolfensberger's theory was a hierarchical structure. The ultimate goal was to enhance the social role of people or groups of people devalued. The purpose of this theory was to enhance the social image and personal competencies by physical settings, relationships, activities, and language. Wolfensberger believed the social role of valorization was a "more accurate descriptor of what the theory of normalization has been all about, but that just as importantly, the phrase can serve as a very instructive consciousness raiser to those who hear and use it" (Wolfensberger, 2011, p. 439). Wolfensberger created these principles to assist in designing, implementing, and developing a comprehensive system of community services for persons with disabilities.

Wolfensberger's work helped create change in the way society viewed people with disabilities. His perspective offered a "powerful tool for deconstructing common service practices and points a way to improve life conditions by emphasizing personhood, citizenship and developmental potential" (O'Brien & O'Brien, 2000, p. 5). He focused on the value and potential of persons with disabilities and provided a philosophical framework that is still in existence today.

Prior to and with the enactment of IDEA 1990 there had been various models of transition developed and implemented (Blackorby & Wagner, 1996; Brolin, 1992; Furney et al., 1997; Halpern, 1985; Kohler, 1996; Will, 1984). Various initiatives have influenced the development of transition services (IDEA, 1990; No Child Left Behind Act of 2001, U.S. Department of Education, n.d.). First, the federal mandate No Child Left Behind (1990) greatly

influenced transition; next, federal, state and local dollars were utilized in the development of transition services and quality research. Furthermore, the last twenty years have been devoted to improving the postsecondary outcomes of students with disabilities (Kohler & Field, 2003).

### **Broadening Transition Model**

In 1985, Andrew Halpern revised Will's Bridges (1984) model. His model incorporated pillars instead of bridges. Halpern conducted a study that modified the original model of transition and sought ways to improve the transition piece by improving high school programs. The first pillar of Halpern's model discusses employment. Job networks, job seeking abilities, wages, employer incentives, discrimination, and structural unemployment are components of this model (Halpern, 1985).

The second pillar represents the residential environment. It encompasses not only the actual home, but the safety of the location and surrounding community services and recreational opportunities. Social and interpersonal concerns are addressed with the third pillar. It includes the human relationships aspect of adult life. These aspects include daily communications, family support, self-esteem and friendship, and emotional maturity (Halpern, 1985).

Halpern conducted research in the states of Washington, Oregon, California, and Colorado. He examined the adult adjustment of individuals with mental retardation who were living semi-independently. This included persons living in a small group home and an apartment with or without a roommate who received supervision from a service agency. Employment was not a major outcome goal. Halpern collected information from the program supervisors as well. What he discovered was a rich data bank of information. The studied revealed success in one area did not relate to success in another. In other words, success in one component of transition did not relate to success in other components. Consequently, Halpern deducted from his research

that transition programs need to be “...directed specifically toward each dimension, with client needs determining the selection of specific services” (Halpern, 1985, p. 482).

His study then addressed the high school foundation. Elements of his research fell into four categories. These included: “general curriculum, vocational education opportunities, programming for transition, and characteristics of secondary special education teachers.” Within the area of general curriculum Halpern discovered teachers identified “...better curriculum materials, more preparation time and less paperwork, opportunities for in-service training in areas of self-perceived weaknesses, and more special education staff, in order to reduce teacher/student ratios” as what they needed to improve instructional quality (Halpern, 1985).

About the realm of vocational opportunities, the research indicated there were significant areas in need of improvement for students with disabilities. For example, for service or machine trade classes, special education teachers reported instruction was not available to their students. Parents and teachers reported the curriculum area needed improvement. The study discovered confusion over whose responsibility it was to coordinate these services. It was revealed 60% of administrators thought this responsibility lay with the special education teacher, and 30% of special education teachers held this viewpoint. The issue of the coordination of these services was recognized as one of the most important needs (Halpern, 1985; Halpern, Yovanoff, Doren, & Benz, 1995).

Transition services were the third issue to be examined. When Halpern addressed these services, he defined them as community agencies that serve adults. The findings revealed only 50% of the administrators noted the presence of even an informal agreement and only 10% indicated a formal existence of agreements. Only 20% of the parents acknowledged receiving services. Additionally, only one-third of the districts provided graduation data to other agencies;

and only slightly more had any follow up data on their graduates. Yet one of the most disappointing pieces of information was one-third of the parents held clear expectations about employment after their child left school (Halpern, 1985).

The final area the study examined was teacher characteristics. This focused on the training, experience, and concerns of special education teachers at the high school level. One positive note was that half of the teachers had earned a master's degree in the area of special education; the discouraging note was 40% earned their teaching certification in the area of elementary education. However, the teachers indicated a strong desire and need to further enhance their skills in all aspects of teaching (Halpern, 1985).

In conclusion, Halpern's study summarized six important goals:

1. Identify and disseminate appropriate curriculum materials that can be used by both special and regular education teachers.
2. Enhance career education opportunities for students through more effective collaboration between special education and vocational education.
3. Establish and implement appropriate interagency agreements that will facilitate the transition from school to adult life in the community.
4. Develop and implement appropriate in-service training opportunities for administrators, teachers and parents.
5. Require a career education component within the IEPs of all secondary special education students.
6. Change the certification requirements in Oregon so that the Handicapped Learner Endorsement, now K through 12, would be divided into separate elementary and secondary endorsements (Halpern, 1985, p. 485).

### **Early Transition Studies**

Hasazi, Gordon, and Roe (1985), examined factors associated with students with disabilities in the Vermont. All of these students had exited high school between the years 1979

to 1983 and had received some form of special education service. They interviewed 301 of the former students to examine “current employment status, employment and training history, and use of social services” (Hasazi et al., p. 455). Several key findings were revealed.

Location was a significant factor for determining employment. The employment rates varied greatly among rural, urban, and metropolitan areas. Students in rural areas were less likely to be employed. Also, significant was gender. “Males were more likely to be employed than females by 30%” (Hasazi et al., 1985, p. 466). The team also discovered the educational and vocational experiences the students with disabilities had in high school impacted their employment. Students who had received services in a resource room as opposed to a special class had higher employment rates. These students had more opportunities to receive instruction in school vocational programs or classes (Hasazi et al., 1985). Moreover, students who held part-time or summer jobs were more likely to gain employment after high school. Oddly, however, students who participated in work programs associated with special education programs were not more likely to be employed compared to those non-disabled peers who did not participate in a work program. It was also noted that males with disabilities were more likely to hold part-time or summer jobs. Furthermore, students with disabilities who had worked during the summer or held part-time jobs earned higher wages after exiting from high school (Doren & Benz, 1998; Hasazi et al., 1985).

Investigations and research continued to examine the transition services being utilized by various states. IDEA, mandated transition services, as well as broadened the members of the IEP team. Students and outside agency representation, such as vocational rehabilitation, were now mandated members of the team. A policy study conducted from 1992-1994 looked at how three different states put into practice transition services for youth with disabilities since the 1990

IDEA Act. Furney, Hasazi and Destafano (1997) identified three sites known to be influential in the field of transition. The sites in the study were chosen because of the ability to demonstrate state policies that were committed to the transition requirements of IDEA, follow-up procedures for determining transition success, evidence of parent and student involvement, and the presence of federally funded grant for transition change. Furthermore, the study took into consideration states that varied in size, location, and ethnic diversity.

What emerged from this study were seven themes. Six of the themes were common in all six states and one theme was present in only two states. The study summarized there was promise for future successful practice. The first apparent theme was the belief of shared values and roles in creating necessary environments that contribute to transition policy. The study looked at the commitment of the communities to people with disabilities. These communities promoted collaboration and created policies to assist in successful transition services. The second theme was the ability to use direct policy approaches to create change. These states had been involved with transition before it was mandated by IDEA 1990. Two of the states had passed legislation mandating transition prior to the federal government's mandate (Furney et al., 1997).

Themes three, four, and five revolved around systematic changes necessary for transition. Theme three was the ability of the states to pave the way for change by uniting leadership and advocacy. All three of the states described key stakeholders in the transition movement in various levels of their governments. Most of these stakeholders held leadership positions allowing them to promote transition services. These included state directors of special education, university professors, adult services administrators, and parent advocacy administrators. These key stakeholders helped to frame theme four--building collaborative structures to promote systemic change. Two of the states had local interagency structures in place. These teams



assisted the development of state and local agreements. Using the results of research and evaluation to inform change efforts was theme five. These states utilized the assistance of university professors to produce follow-up studies about post-school outcomes for students with disabilities. All three of the states reiterated the importance of continuing with such research as it was critical to understanding and improving transition policy and practices (Furney et al., 1997).

The last two themes were building the capacity for long lasting change and the ability to look into the future to link transition to other restructuring efforts. Again, all three states noted the necessity of “initiating and continuing systems change efforts related to transition” (Furney et al., 1997, p. 351). The states noted the need to continually examine ways to bring new personnel, funding, and training to the needs of their communities. Lastly, the states noted the importance of the future policies and services to being connected to the overall education reform. Comments included the necessity of transition planning to those who were and were not disabled (Furney et al.).

### **Longitudinal Study**

A longitudinal study was conducted in 1996 by the National Longitudinal Transition Study (NLTS). The study was conducted by the Office of Special Education Programs (OSEP) to document experiences of youth with disabilities after high school. This study examined how youths with disabilities had managed in the first five post high school years--specifically post-secondary education and employment. By this time the issues concerning transition services and programming had been present in the literature for over a decade. Additionally, federal mandates had also been implemented. The focus of this study not only addressed employment issues but also examined other important components of transition. These other components included post-secondary education and residential independence (Blackorby & Wagner, 1996).

The study noted employment status of students with disabilities had been a primary concern since the beginning of the transition movement. The authors stated “some measure of employment is found in virtually every example of post-school follow-up research involving people with disabilities” (Blackorby & Wagner, 1996, p. 400). The study concluded that although employment rates of youths with disabilities employment rates had risen 11%, they still lagged significantly behind employment rates of their same age peers. There was also a marked difference in employment rates among varied disabilities. For example, students with learning disabilities had higher employment rates than students with serious emotional disturbance. Students with multiple disabilities had the lowest employment rate. African-American youth with disabilities were almost twice as likely to be employed when this study was conducted as compared to rates in 1987. However, their employment rates were still lower than white youth with disabilities. After two years out of high school, African-American youth with disabilities had a 25.5% employment rate compared to white youth with disabilities having a 53.1% employment rate. Three to five years after high school African American youth with disabilities had a 47.3% employment rate as compared to white youth with disabilities at 60.8% (Blackorby & Wagner, p. 404).

The study also examined post-secondary education. Two years after being out of school, only 14% youth with disabilities attended some form of post-secondary schooling compared to 53% of the general population. However, again, youth in some disability categories were more likely than others to have some type of post-secondary education. Youth with deafness, visual impairments, or speech impairments were more likely to attend post-secondary education as compared to other youth with other disabilities (Blackorby & Wagner, 1996). In addition, National Council on Disability (NCD) report 28% of the general population had completed

college by age 25 or older. Yet, persons with disabilities only completed at half of that rate (National Council on Disability [NCD], 2011).

Residential independence was the third area the study addressed. It was noted 13% of youth with disabilities were living independently less than two years after secondary school as compared to one-third of the general population. “However, as youth with disabilities were out of secondary school for a longer period, independent living was much more common, increasing from 11% to 37%” (Blackorby & Wagner, 1996, p. 409). Yet, even with this increase, residential independence among youth with disabilities was significantly below that of youth in the general population. It was discovered youth with other health impairments, mental retardation, multiple disabilities, or deafness/blindness had considerably lower rates of residential independence. Another noteworthy finding about residential living had to do with graduation. Youth with disabilities who had graduated had a larger gain in residential independence than those who had dropped or aged out. Hence, the finding between living independence and secondary school completion was consistent (Blackorby & Wagner, 1996).

Another National Longitudinal Transition Study 2 (NLTS2 2005) follow-up study, noted as waves, was conducted to compare the two groups of students with disabilities. The NLST2 addressed many of the same issues as NLST yet NLST2 extended the scope of NLTS. The study demonstrated the extent to which youth with disabilities, special education and student outcomes had changed. NLST data is denoted as cohort 1, whereas NLST2 data is denoted as cohort 2. Differences between cohorts included an increase in the number of academic courses youth with disabilities were taking, greater likelihood that students with disabilities received their instruction in regular schools, and increased frequency that those SWD taking academic courses were doing so in the general education classroom. In addition, by cohort 2, teachers in the general education

classrooms were more likely to receive support in educating students with disabilities (Wagner, Newman, Cameto, & Levine, 2005, pp. 1-2).

Findings from the study indicated the school completion rate for youth with disabilities had increased and the dropout rate had decreased. Youth with learning disabilities or mental retardation had high school completion rates up to 70% in cohort 2. Completion rates for youth with speech, hearing, visual, or orthopedic impairments ranged from 79% to 94%. However, even though there had been a 16% increase in school completion rates, overall youth with emotional disturbances only had high school completion rates of 56%. Youth with other health impairments or deaf-blindness were 59% and 51% respectively. It should be noted youth with emotional disabilities or multiple disabilities or deaf-blindness had also been the least likely to finish high school in cohort 1 (Wagner et al., 2005, pp. 2-3). However, it should be noted dropping out of secondary education is reversible. Youth with disabilities are still able to re-enter secondary schools to obtain a diploma or work to obtain a general education development (GED) credential. Although youth with disabilities in NLTS2 were more likely than their peers in NLTS to complete high school, those youth with disabilities who dropped out in 2003 were no more likely to earn a GED or other high school equivalency than students who had dropped out in 1987. “Twenty-five percents of the students with disabilities in cohort 1 who dropped out and 22% of the students in cohort 2 participated in a program to receive a high school diploma or certificate” (Wagner et al., p. 4). In the state of Indiana, by cohort 2, 32% of students with disabilities graduated with a diploma, 7% received some form of certificate, and 15% dropped out (National Council on Disability [NCD], 2011, p. 63).

With regards to employment, youth with disabilities in cohort 2 were more likely to have worked for pay after the first few years of high school (70%) compared to cohort 1 (55%).

However, there was no difference over time in the likelihood of out-of-school youth being competitively employed (Wagner et al., 2005, p. 5). In addition, there were considerable increases in out-of-school earnings for youth with disabilities; however, there was no real change in earnings over time when wages were adjusted for inflation. Cohort 1 earned \$7.80 per hour and cohort 2 earned \$7.30.

At this average wage, the 40% of cohort 2 youth with disabilities who were working full-time would have earned an average of \$14,600 per year; the majority who were working part-time would have averaged \$9,125 for 25 hours of work per week--less than the federal poverty threshold of \$9,573 for a single household (Wagner et al., 2005, p. 7).

Data from NCD (2010) further denotes a significant discrepancy on earnings between persons with and without disabilities. In 1989, persons without disabilities earned an average of \$57,100 and persons with disabilities earned \$33,500. Eight years later, persons without disabilities earned \$59,500, and persons with disabilities \$32,300 (NCD, 2011). Bureau of Labor and Statistics (2012) reported in 2011, that 17.8% of persons with disabilities were employed. This rate had fallen from the 18.6% reported in 2010. In contrast, persons without a disability had a 63.6% employment rate (Bureau of Labor and Statistics, 2012, p. 1).

NLTS2 (2007) Wave 3 data indicate 72.6% of youth with disabilities continue to live with their parents after high school, 9.9% live independently, and 0.5% live in a group home and/or assisted facility. Only 7.7% were attending a four-year college or university and 12.8% were attending a community college. One encouraging finding was that the employment data indicated 55.1% of youth with disabilities had a paid job a year or more after exiting high school. Yet, a need still exists to improve postsecondary education, employment, and independent living (Heal & Rusch, 1995; Test et al., 2009b).

Although there were increases in independent living between cohort 1 and cohort 2 for African-American and Hispanics youth with disabilities, racial differences still remain. Changes over time revealed white youth surpassed African-American peers in living independently. In addition, only white youth with disabilities had a significant increase in postsecondary enrollment and employment (Wagner et al., 2005).

The NLTS2 data has provided a framework for further research into the needs of students with disabilities. Leonard, Allura, and Horowitz (1999) used findings from the NLTS2 data to examine post-school outcomes for persons with visual impairments. The data indicated persons who are blind or partially sighted had a significantly lower rate of employment than the general population. The data indicated 46% of persons with visual impairments were employed and this figure decreased to 26% for persons who had a severe visual impairment. The general population was employed at 80% (Leonard, D'Allura, & Horowitz, 1999).

Another significant finding was that persons with visual impairments were less likely to be employed at levels that were consistent with their educational attainment and skills. In addition, their monthly income was approximately 20% less than the monthly income of employed persons without disabilities. For persons with severe visual impairments, the monthly income was 37% lower. Reasons for high unemployment included lack of transportation, lack of access to and the cost of technology, lack of employment-related skills, and negative attitudes and concerns from employers (Leonard et al., 1999).

A strong relationship was found in the research between the types of school the respondents attended. If the respondent was included in the general education setting for 74% or more of his/her day, the respondent was more likely to be employed post-school. The importance of social skills was also significant. Employers ranked social skills as being one of the most

important skills. In addition, respondents who had received technology training were twice as likely to be employed as those who did not have technology skills (Leonard et al., 1999).

### **Examining the NELS and NLTS Data**

Harvey (2002) examined data from the National Education Longitudinal Study of 1988-1994 (NELS: 88-94) to compare postsecondary outcomes between students with disabilities and those without disabilities. This work was important because it examined secondary vocational education participation and postsecondary outcomes for students with disabilities. The findings were in line with follow up studies (Wagner & Blackorby, 1996, Wagner et al., 2005). Students with disabilities who had earned a high school diploma were more likely to participate in postsecondary education. In addition, persons with disabilities with an economic responsibility were less likely to participate in postsecondary education. Married respondents were more likely to be employed and had higher job satisfaction; they were also less likely to have postsecondary education. Males were more likely to be employed than females (Harvey, 2002).

Shandra and Hogan (2008) utilized data from NLTS2 to research education to employment transition for youth with disabilities. The research found there are effective methods to facilitate vocational success; however, different features of school-to-work programs are needed to meet the different types of employment. The transition from school to work is crucial for students with disabilities. Disproportionate percentages of youth with disabilities leave school and cannot find employment. In addition, specially designed curricula may give youth with disabilities less access to needed transition resources and fewer opportunities to obtain the needed academic and social skills that are necessary for successful employment (Shandra & Hogan, 2008).

The NLTS2 data proposed several reasons why post-school employment is crucial for youth with disabilities. One, youth who are out of schools are more likely to establish residential and financial independence with gainful employment; and 2) post-school employment provide social resources for youth with disabilities. These resources include paid sick days, insurance and retirement benefits. In addition, the data suggested that there are emotional ties to other employees that increase overall well-being (Kellems & Morningstar, 2010; Shandra & Hogan, 2008).

School-based as well as work-based transition programs hold four intentions for youth with disabilities. First, these programs provide actual or simulated work experience. This can aid resume building and demonstrate future employability of SWD. Second, these programs provide networking opportunities with potential employers who may provide possible employment. Third, school-based and work-based transition programs provide formal and/or informal skill certification not traditionally offered in the regular curricula. But perhaps the most important intention is the increase in the level of understanding of disability-related work accommodations and the legal employment rights for youth with disabilities (Phelps & Maxwell, 1997; Shandra & Hogan, 2008).

The research findings suggested school-based and work-based transition programs are advantageous for youth with disabilities. However, it should be noted that different aspects of these programs are beneficial for different aspects of employment. School-based programs may be best for increasing the likelihood of students with disabilities to be employed and working full-time. Yet, youth with disabilities who had participated in work-based transition programs have an increased likelihood of being employed in jobs that provide fringe benefits. Both of these programs provide needed support for youth with disabilities to enter the field of



employment. In addition, these programs aided in the development of network ties between students and employers (Phelps & Maxwell, 1997; Shandra & Hogan, 2008).

The federal government has mandated transition reform for over twenty-five years. However, follow-up studies and government reports emphasize that in areas of learning, living, and employment youth with disabilities continue to lag behind their general education peers. More than a strong federal commitment is necessary to implement successful transition for students with disabilities.

### **Foundation for Transition Practices**

Paula Kohler further worked on developing a transition program. She published a seminal review in 1993 of substantiated and implied best practices in the area of transition. The research extended over the years of 1985 to 1991. Kohler obtained 49 documents that touted transition best practices. After evaluating these practices, she confirmed vocational training, parent involvement, social skills training, paid work experience, follow-up employment services, integration in the general education setting, daily living skills, and employability skills promoted transition best practices (Landmark, Ju, & Zhang, 2010). The results assisted Kohler in developing *The Taxonomy for Transition Programming* (1996). In her model, she created five areas needed for successful transition. The first area was student-focused planning. She included the individual education plan (IEP), student participation, and planning strategies. As goals were developed options were created. This helped to determine post-secondary education or training that may be needed. Additionally, leisure goals and community living goals were addressed (Kohler, 1996).

The model continued with student development. This was the area where instructional strategies and goals were examined and developed. This included life skills, employment skills,

career and vocational curricula as well as support services. Assessing vocational, academic, cognitive, and adaptive behaviors were all components of the student development piece (Kohler, 1996).

The model had a component for interagency collaboration. In this area, requests for reports were generated. Kohler integrated collaboration with agency's staff and employers, to guide a shared delivery of services. This component also addressed formal interagency agreements and the lead agency was identified. This coordinated system reduces the barriers to collaboration in addition to coordinating and sharing the delivery of transition-related services. It assists in the development of roles of the service providers and defines the contact person for all agencies (Kohler, 1996).

Family involvement was the fourth component. This allowed for involvement in the program development and the service delivery. This component additionally assisted conceptualizing the importance the family plays in the IEP conference as being support members of the transition team. This family involvement helps movement to the final component program structure. All of the previous components come together to crystallize the program philosophy, evaluation, strategic planning, program policy, human resource development, and resource allocation (Kohler, 1996). As youth with disabilities continued to lag behind, focus was concentrated on teacher education programs. Indications from research concluded neither IDEA mandates nor research-based transition practices had been consistently implemented. Furthermore, reports found that 37 of 39 states in a given study received some finding of non-compliance concerning transition (Kohler & Field, 2003).

### **Transition Programs and Practices**

The Life-Centered Career Education Curriculum (LCCE) was developed in 1978

by Donn Brolin. The LCCE approach is a career development functional approach to transition. The program focuses on 22 major competencies that students need to acquire in order to succeed in daily living, personal-social, and occupational areas after they leave school. The LCCE competencies further subdivide into 97 sub-competencies that relate to one or more of four important career roles that represent a worker. The program is a kindergarten through grade 12 approach. It is built on the premise of four stages of career development: career awareness, exploration, preparation, and assimilation. It requires a relationship between educators, families, community agencies, and employers (Brolin & Gysbers, 1989).

The career awareness phase of LCCE is implemented in the elementary years. It involves guidance activities as it focuses on assisting students with disabilities to begin to learn about feelings, values, and potential. This phase allows children to develop feelings on confidence and self-worth. It teaches desirable behaviors and effective communication skills. The career exploration phase is implemented in middle school. In this phase, the students are exploring abilities and needs, the requirements to enter the world of work and avocational and/or leisure activities. In the guidance area, the students are exploring career clusters that incorporate hands-on experiences in and out of school (Brolin & Gysbers, 1989).

Special attention is given to the preparation phase in middle school throughout high school. Specific interests, aptitudes, and skills are identified. The career choices are more in line with specific vocational and academic instruction. Vocational assessments, employment samples, and job exploration are important in this phase. Students with disabilities require additional time to prepare for the world of work. Students with disabilities have life-long learning needs, and supportive guidance pieces need to be in place to provide follow-up and placement (Brolin & Gysbers, 1989, p. 158).

It is important to be mindful of the fact post-school outcomes and secondary programs look different for students with low-incidence disabilities such as moderate cognitive disabilities, autism, and multiple disabilities. Furthermore, employment supports and resources are different. For most SWD, on-going, individual supports are going to be needed in order for them to participate in inclusive employment experiences. Many of these students with disabilities attend school until the age of 21 and are likely to receive a certificate of completion as opposed to a diploma. Moreover, these youth may receive funding through the developmental disabilities office at the state level. This funding is dispersed through community rehabilitation providers (CRP). Current recommended practices for students with low-incidence disabilities stress the necessity to balance accessing general education classes in addition to providing functional and community-based opportunities, teaching self-determination skills, and using assessment to develop interagency collaboration with families and adult agencies (Kaehne & Beyer, 2009; Moon, Simonsen, & Neubert, 2011).

Moon, Simonsen, and Neubert (2011) conducted a study to determine what youth with low-incidence disabilities, families, and educators need to know about the eligibility of CRPs, what skills are needed by youth with low-incidence disabilities to gain supported employment, what assessments are important, and what suggestions do CRP staff have to improve outcomes for transitioning youth with low-incidence disabilities. Staff from CRPs was surveyed to determine skills and experiences they perceived as important for transitioning youth with low-incidence disabilities (Moon et al., 2011).

What was discovered was that CRPs indicated although it is not required to be accepted by a CRP, work experience impacted initial employment placement. Over 50% of the survey participants indicated concern over unrealistic parental expectations of employment for youth

with low-incidence disabilities. Parents did not want sheltered workshops, however the student had few, if any, independent work experiences. Additional outcomes indicated the need for youth to understand acceptable behavior and have good personal hygiene skills. Furthermore, educators and families needed to understand excessive absences and/or non-compliance could result in termination of services. A variety of skills were noted as critical for supported employment. These skills included self-advocacy, self-determination, safety awareness, social skills, communication, and travel skills. Skills that inhibited supported employment opportunities for youth with low-incidence disabilities included negative behavior, poor hygiene, poor safety skills, and toileting issues (Moon et al., 2011).

One important item that was consistent with all youth with disabilities was the use of assessments to indicate interests and preferences to employment. It is important to note, none of the surveyed participants had heard of received a summary of performance (SOP). “The SOP document, mandated by the Individuals with Disabilities Education Act (IDEA) of 2004, is supposed to summarize a student’s previous assessment information, goals, supports, and needs for the future” (Moon et al., 2011, p. 98). In addition, over 50% of the survey staff indicated family members rather than the youth, would report interests and preferences for employment (Moon et al., 2011).

Attitudes of the staff toward different types of work experiences were also discussed. The participants stated unpaid work-experiences aided in determining student preferences. However, surveyed participants did not view work paid with school stipends as a single work experience before youth exited school. The importance of realistic work experience for pay was reinforced. The participants noted willingness to transition youth in a paid employment position

if the youth indicated a preference for that job and if transportation could be maintained easily (Moon et al., 2011).

Areas of improvement for successful transition of youth with low-incidence disabilities are the need for teachers and other school personnel to be knowledgeable about adult services and the funding sources. Families need to be informed about the differences in adult services and special education. It was also noted youth, not parents, need to indicate employment preferences. In addition, it is necessary to have authentic assessments and information about the youth that described work experiences and preferences, self-management, and self-advocacy skills (Moon et al., 2011).

### **Assessment and Transition**

Assessment techniques can assist the transition team in planning for successful post-secondary transition. Sitlington, Clark, and Kolstoe (2000) organized the techniques into five categories: (a) analysis of background information, (b) interviews and/or questionnaires, (c) psychometric instruments, (d) work samples, (e) curriculum-based assessment techniques, and (f) situational assessment (Sitlington & Payne, 2004).

In the first category, information was gathered from school personnel who had worked with the student. This was much more in-depth than the general cumulative folder. This included records of any outside agencies that may have needed information on the student. In the second category, interviews or questionnaires can be conducted with not only the student, but with family, counselors, former educators, and support staff. This can be a great opportunity to determine what past accommodations have worked while also providing insight into the student's interests (Sitlington & Payne, 2004).

The third category included the use of psychometric testing. These instruments provide information regarding the student's functioning level and learning style. Work samples are used in the fourth category. These are formal activities that revolve around actual jobs or job clusters. "These samples have a standard set of directions, tasks, materials and key behaviors to observe, and allow the individual to perform within a controlled environment, often learning the tasks as they are being performed" (Sitlington & Payne, 2004, p. 9).

Curriculum-based assessments measure the student's functioning level as compared to state, local, and classroom standards. This can include curriculum-based measurement, vocational assessment, and portfolio assessment. A curriculum-based assessment uses specific assessment techniques in the areas of reading, written expression, spelling, and math. The vocational assessment comes from observing the student in career and technical education courses or other work-related instruction. The last assessment piece is situational assessment. The employer conducts systematic observations of the student in environments as close as possible to the student's future living, educational environment or working condition (Spradlin & Hiller, 2012).

Assessment techniques need to be ongoing and integrated in the transition planning process. To facilitate the discussion of employment, education, or independent living needs. Using the assessment approach, with active student involvement, will determine transition needs (Clark, Field, Patton, Brolin, & Sitlington, 1994; Sitlington & Payne, 2004, p. 8).

Transition assessment and postsecondary goals were found to be essential elements in IEP planning by Mazotti et al. (2009). Transition assessment is the starting point for successful transition planning. Assessments determine present levels of performance, which assist in developing appropriate transition goals, services, and other related IEP goals. In addition it

identifies skills for student success (Sitlington & Payne, 2004). Transition assessment normally covers vocational interests, self-determination skills, independent living skills, and recreational/leisure activities. The use of formal and informal assessment is best practice (Mazzotti et al., 2009).

### **School to Work Programs**

Postsecondary outcomes, especially in the area of employment, were examined; and keeping a job was found to be a major hallmark of adult status. A study conducted by Fourqurean, Meisgeier, Swank, and Williams (1991) examined a set of variables predicting postsecondary success in addition to providing a framework of employment adjustment in the first years after leaving high school. The study was conducted with youth with learning disabilities (LD) between the years 1986 and 1989 (Fourqurean, Meisgeier, Swank, & Williams, 1991).

The study discovered 86% of the youth were employed and 25% of those were employed part-time. The job titles that were the most common job titles were sales clerks, hairdresser/cosmetologists, employment in moving and storage materials, and armed services enlisted personnel. These reported rates were higher than other follow-up studies. This could have been due to the economic opportunity that existed in this particular community. Three predictors were discovered with successful employment. The first predictor was math ability. Many of the jobs held by the participants required daily, practical math skills. The second predictor was high school employment. Students with disabilities who had employment during high school were better able to cope with job demands. In addition, they had background knowledge of the type of employment they would enjoy. The third predictor was active parent participation. This was represented by the number of IEP meetings the parent attended. It was



determined to be one of the most important predictors of postsecondary employment success (Fourquarean et al., 1991).

The study suggested secondary schools should strive to make specific efforts to ensure LD students leave high school with the best possible math skills, employment experience and all efforts are made to increase parental involvement. The study also noted the necessity of educators who work with students with disabilities to be flexible and innovative in teaching strategies to promote necessary skills for successful transition (Fourquarean et al., 1991).

A program titled The Bridges from School to Work was developed by the Marriott Foundation for persons with disabilities. The mission of the program is to create fulfilling employment for youth with disabilities exiting secondary school. The program stresses the development of strong, mutually beneficial employer/employee relationships. The program works together with the public school system and often is found in metropolitan areas (Marriott Foundation, n.d.).

The core of the program is conducted between the student and the employer representative. There are three phases of the program. The first phase is the prevocational orientation program. During this phase the student and his/her family are introduced to the Bridges program and vocational goal setting activities are carried out. This is a two to three week process. In the second phase, prevocational preparation, individual career guidance, job preparation, and job search training is implemented. A timeline of two to four weeks is given for completion of this phase. The final phase is internship placement and support. Included in this phase are job-specific skills training, monitoring of work performance, and any other activities needed to support the employee-employer relationship. Twelve weeks is the timeline for

completing phase three. It should also be noted internship positions are paid and involve competitive employment (Fabian, Lent, & Willis, 1998).

To determine if paid internship programs assisted in successful transition to employment for students with disabilities, Fabian, Lent, and Willis (1998) conducted a study of 2,258 special education students participating in 13 cohorts of the Bridges program between 1990 and 1995. The sample was 62% male and 48% African American, 21% Hispanic, and 5% Asian American, 22% European American, and 3% other. The most prevalent disability category was 52% learning disabled, 22% mental retardation, 14% emotional disability, and 12% other disabilities (Fabian et al., 1998).

The results of the study concluded 76% of the students who participated in the Bridges program over the five-year period completed his/her internship placement. Of those completers, 71% accepted a job with the same or other employer. A six-month follow-up assessment was conducted and 84% were gainfully employed or had enrolled in postsecondary education. The study suggests a strong correlation between a structured school-based internship and successful postsecondary employment outcomes. Furthermore, although national transition data propose gender, race and disability categories are associated with postsecondary employment outcomes (Wagner & Blackorby, 1996), these variables had little impact on this study. The researchers found work-related behavior such as hours worked and the completion of an internship served as predictors for success. This could also lead to the suggestion internship participation could be beneficial across gender, disability, and race categories (Fabian et al., 1998).

Findings from other studies substantiated the need for strong school-to-work programs for successful transition. Researchers examined school-to-work program participation and postsecondary work outcomes. Their results suggested participation in school-to-work programs was

related to employment in addition to employment with fringe benefits. They found students with disabilities who participated in such a program and/or received technical preparation were more likely to have stable employment after exiting high school (Benz, Lindstrom, & Yovanoff, 2000; Bullis & Davis, 1995; Shandra & Hogan, 2008).

The Self-Determined Career Development Model is designed for students with emotional and behavior disorders. It is designed to assist and promote self-determination skills to set employment/career goals, develop and initiate a goal attainment plan, and adjust and evaluate progress. Students choose an employment goal and work through the model to plan, implement and achieve that goal. Data from NLTS indicated 41% of youth with emotional and behavioral disorders (EBD) were employed two years after high school as compared to 59% of youth without disabilities. Furthermore, youth with EBD tended to obtain lower paying jobs as compared to youth with other types of disabilities (Benitez, Lattimore, & Wehmeyer, 2005).

One significant factor found to improve adult outcomes is self-determination (Carter, Lane, Pierson, & Stang, 2008; Wehmeyer & Bolding, 2001; Wood, Karvonen, Test, Browder, & Algozzine, 2004). Wehmeyer and Schwartz (1997) found youth with self-determination skills were more likely to live independently, be financially independent, and obtain employment with benefits. In addition, acquiring self-determination skills assists in increasing student involvement in educational planning and achieving positive adult outcomes.

The study concluded self-determination is an important post-school outcome for students with disabilities. The data were consistent in determining a consistent trend that youth with self-determination skills had better post-school outcomes than youth with low self-determination skills. Youth with disabilities that had high self-determination skills were more likely to express the desire to live independently, have a savings and/or checking account, and be employed.

Educators can assist in developing self-determination skills by including “(a) choice making, (b) decision making, (c) problem-solving, (d) goal setting and attainment, (e) self-observation skills, (f) self-evaluation skills, (g) self-reinforcement skills, (h) internal locus of control, (i) positive attributions of efficacy and outcome expectancy, (j) self-awareness, and (k) self-knowledge” (Wehmeyer & Schwartz, 1997).

The Self-Determined Learning Model of Instruction (SDLMI) helps teachers to support self-directed learning in SWD. The SDLMI uses a three-phase process for students to select goals on which they choose to work. Students have support as they answer four questions in each instructional phase. If barriers are discovered, students are encouraged to work through each barrier to find solutions. The results of the study indicated promoting self-determination skills increase employment outcomes for youth with EBD (Benitez et al., 2005).

### **Teacher Education Programs**

Since teachers play a critical role in transition development and implementation, Kohler and Greene (2004) examined practices to provide pre-service teachers pursuing special education with transition-related training. Moreover, most secondary special education teachers receive transition training “on-the-job” and they felt unprepared for transition implementation (Kochhar-Bryant & Greene, 2009). Three specific strategies have been examined to integrate transition related knowledge and content into postsecondary education. The first strategy was to infuse transition competencies into teacher education. This would assist in communicating the notion that transition should not be “added on” to an IEP, but rather a process with integrated components. The next strategy examined specialized coursework, focused on the development and implementation of transition. This allows students to study the process of transition in detail including specific assignments and experiences, which cover components of transition. The third

strategy was a combination of both of the above approaches (Kohler & Greene, 2004). In addition, the Taxonomy for Transition Programming (Kohler, 1996) can be used as a conceptual framework to organize the transition-related content. The Council for Exceptional Children (CEC) Division on Career Development and Transition (DCDT) supports these findings by Kohler and Greene. On the fact sheet for secondary special educators, CEC reiterates the importance of professional development regarding student-focused planning, student development, interagency collaboration, family involvement, and program structures and policies (Council for Exceptional Children Division on Career Development and Transition [CEC DCDT], n.d.).

Li, Bassett, and Hutchinson (2009) conducted a similar study. The researchers examined the roles and responsibilities of secondary special educators to determine if there were any gaps in teacher knowledge and involvement in the transition process. Special education teachers normally assume the role of providing direct services to students with disabilities in addition to advocating for students in the IEP meeting.

They concluded many factors contribute to unsuccessful transition experiences. However, professionals are poorly trained in the different transition roles and responsibilities, including transition assessment, planning, instruction, and collaboration with outside agencies. A total of 343 participants were rated on their involvement in different aspects of transition which included transition assessment, transition planning, transition instruction and curriculum, interagency collaboration, and job development. A five-point scale was used for the ratings with one being never and five being with very high frequency (Li et al., 2009).

Findings in the area of assessment were that educators rated themselves 3.28 in the area of transition assessment. The educators scored themselves slightly higher in the areas of

curriculum and instructional activities to specific skills in addition to self-determination. The overall score in this area was 3.80. The highest level of transition involvement was in the area of planning. The overall score was ( $M = 4.19$ ). However, the two lowest scores were interagency collaboration; ( $M = 3.15$ ) and job development ( $M = 2.93$ ). This is disturbing, as interagency collaboration and employment have been viewed as the most important component of transition (Will, 1984; Halpern, 1985).

Additional findings from the study indicated a need for improving special education teacher training programs. This coincides with the research findings of Kohler and Greene (2004). Special education preparation programs should provide training on collaboration in addition to specific transition-related knowledge and skills. Findings also suggested coursework should emphasize interagency collaboration, barriers to effective interagency collaboration skills, and communication skills. Finally, the teacher preparation programs must also concentrate on the beliefs and attitudes toward the importance of transition for students with disabilities (Li et al., 2009).

A position paper presented to Division on Career Development and Training (2009) outlined the need for a comprehensive personnel preparation to assist with transition and career development. The paper outlined a framework with key elements to support and assist in creating quality experiences for educators working with students with disabilities. The paper consisted of four major sections with each section defining a grounding principle needed in preparation programs (Blalock et al., 2003).

The first section discussed contextual factors influencing personnel preparation in the field of transition. This included courses of study, local and state improvement efforts, standards and mandated state assessments. It identified transition training and assistance as a priority for

youth with disabilities. However, most special education professionals receive their training on the job. The effective secondary transition program depends on the training and preparedness of not just special education personnel, but administrators, guidance counselors, and general education teachers. Effective secondary personnel will improve efforts to include students with disabilities in the general education setting, assist with providing career-vocational transition services, and improve collaboration with families (Blalock et al., 2003).

The push for accountability and high stakes testing created another barrier to successful transition programs for youth with disabilities. Even with academic support, the mastery of general education content takes precedence over student specific transition needs. For transition services to be effective, educators must be cognizant that transition planning must incorporate content standards, work-based competencies, and self-determination. Educators need to understand how to embed mandated assessments into the transition process. The standards associated with the assessment can provide a snapshot of how the students are performing in the general education setting. Furthermore, alternate assessments have the ability to provide evidence students with disabilities are mastering standards through real life opportunities.

The final contextual issue in the first section was licensure issues. Many states offer a K-12 categorical and/or categorical license. The number of courses needed to fulfill this type of licensure limits the amount of course time. Transition content must be shared with numerous other topics related to special education preparation. This is unlikely to change until individual states change license/certification requirements (Blalock et al., 2003).

The second principle discussed the preparation needed for instructional programs. It defined the principles, models, and strategies that have been proven to support transition for students with disabilities. It is important to note the cornerstone for effective transition services

is embedded in the planning process. It is imperative special educators and other involved in the transition process have knowledge of IDEA transition requirements and the skill to involve the student in the transition process. Educators must be prepared to assist students in developing skills needed to acquire and apply self-determination skills. In addition, students must have opportunities to develop academic, independent living, career awareness, and work-related competencies. Educators need to know how to effectively communicate with families and collaborate with agencies (Blalock et al., 2003).

The third principle addressed the need for higher education institutions to increase inclusion of appropriate transition content in preparation programs. The importance of the general education teacher cannot be overlooked. IDEA (1997) mandated that general education teachers must attend IEP meetings in addition to assisting with IEP development. The general education teacher is now the largest division of school personnel serving students with disabilities. Institutes of high education need to infuse programs that instruct general education teachers in the legal mandates surrounding transition as well as student involvement in educational decision-making. Vocational educators must be competent in gathering information needed for assessment for career and employment needs of the student with disabilities (Blalock et al., 2003).

The final principle involved aligning efforts to improve the “quantity, quality, and diversity of personnel serving all students so that appropriate supports and services are available for students with disabilities to reach their post-school goals” (Blalock et al., 2003, p. 220). An investment in quality personnel is needed to obtain transition services for students with disabilities. Institutions of higher education (IHE), state education agencies (SEA), and local education agencies (LEA) must integrate a level of pre-service and continual in-service



preparation. This integration will assist in aligning systems to help states overcome critical shortages in personnel (Blalock et al., 2003).

Current research from Morningstar and Benitez (2013) confirmed training matters if successful transition programs are to be implemented. Their research confirmed offering a transition course was the most common form at teaching transition content at the collegiate level. The unfortunate side of this finding was that faculty interest and knowledge of transition was often tied to the teaching of this course. Yet, another common approach was infusing transition content in already existing courses. Many states are moving toward K-12 non-categorical teacher standards, thus creating pressure to cover a wide range of material (Morningstar & Benitez, 2013).

Further findings from Morningstar and Benitez (2013) indicated that implementing successful transition programs had little to do with whether the special education teacher was a veteran teacher or a beginning teacher. This was a surprising discovery of the research. It was the belief newly graduated teachers would have been better prepared to be educated on transition services and programs. However, respondents in this research indicated they had an average of 28 hours of in-service and/or staff development in transition services and programs. The results of this research indicated a strong belief in a systematic need for programming that addresses transition services and programs (Morningstar & Benitez, 2013).

### **Improving the Planning Process**

In 2000, Richard Roessler outlined three recommendations needed to improve the IEP transition planning process. He first discussed the need for quality assessment to determine student transition goals. Roessler concluded the assessment instruments themselves were not relevant to the transition goals. “Second, even if they have transition-related assessment data,

IEP teams can stray from using those results to develop goals and select instructional strategies for the plan” (Roessler, 2000, p. 32). He concluded transition goals can be aligned to the IEP if the assessments identify knowledge and performance deficits to life skills needed by the student (Roessler, 2000).

Roessler also noted the need to “incorporate perspectives of students and parents.” He stated there was ample research to demonstrate the need for multiple perspectives during the IEP transition planning. He discovered many parents are not involved in the IEP development. Furthermore, the involvement should not end in the IEP conference. There should be updates on the student’s progress toward goals developed (Roessler, 2000).

The last recommendation Roessler discussed was to specify interventions. He found too often academic goals were developed, but not interventions for crucial life skills. He stated the need to develop community goals, hygiene goals, as well as recreation and leisure goals. Roessler also noted the need to develop and implement financial literacy skills (Roessler, 2000).

Further studies examined the transition services of secondary students with disabilities. A study completed by Johnson, Stodden, Emanuel, Luecking, and Mack addressed five challenges with transition services (Johnson, Stodden, Emanuel, Luecking, & Mack, 2002). The first and second challenges focused on access to the general education curriculum for students with disabilities. The need to align 1997 IDEA requirements with transition services was discussed. Strategies to assist this alignment included, “promoting high expectations for student achievement and learning, making appropriate use of assessment and instructional accommodations, and ensuring that students have access to the full range of secondary education curricula and programs” (Johnson et al., 2002, p. 528).

Post-school experiences in post-secondary education, employment, and independent living were the focus of challenge three. Self-advocacy skills to assist in the post-secondary experience were critical for success. Additionally, students need to have access to necessary support systems. This includes the support of community agencies such as health, mental health, and transportation. Challenge four centered on successful strategies. This included decision-making skills, self-determination skills, and the ability to set goals. These skills will help facilitate student involvement in the transition IEP meeting. Strategies could include classes that promote self-determination or sending home information to help the parents prepare their child for post-secondary education (Johnson et al., 2002).

Challenge five addressed the importance of collaboration of services at all levels of the government. “Strategies here include promoting cross-agency staff development programs, developing cross-agency resource sharing options in making available needed transition services, and developing mechanisms to share information across agencies on the progress and outcomes of further special education students” (Johnson et al., 2002, p. 529).

### **Indiana Initiatives**

The National Transition Network (NTN) has established each state with annual technical assistance to improve the “availability, access, and quality of State-Level transition policies, programs, and practices for youth with disabilities” (Office of Special Education Programs [OSEP], n.d., p. 1). The technical assistance plan was based on the assessment of the State’s current transition-related policy, practices, service delivery, and interagency approaches. There were a variety of methods that NTN used to assist states. For example, there are on-site visits, teleconferencing, and various types of information disseminated. Moreover, there are opportunities for regional meetings. Indiana was funded a grant in 1992 to improve knowledge

and skills in the area of transition. This included how to conduct assessments; design/deliver training to State staff, deliver technical assistance to local education agencies (LEA), employers, advocates, and transition teams; organize interagency conferences; train families for transition; involve youth; conduct public forums; and develop resource directories. In addition, there was assistance for improving working relationships with interagencies (OSEP).

Each state was required to have a general supervision system monitoring IDEA implementation. This system was delegated to enforce state and federal requirements, which include positive outcomes for students with disabilities. This consists of monitoring performance and compliance for indicators pertaining to transition services. These include:

Indicator 1: Percent of youth with IEPs graduating from high school with a diploma;

Indicator 2: Percent of youth with IEPs dropping out of school;

Indicator 13: Percent of youth aged 16 and above with an IEP that includes coordinated, measurable, annual IEP goals and transition services that will reasonably enable the student to meet the post-secondary goals;

Indicator 14: Percent of youth who had IEPs, are no longer in secondary school and who have been competitively employed, enrolled in some type of postsecondary school, or both, within one year of leaving high school (IDOE, n.d., pp. 1-2).

These indicators provide important data as they track students with disabilities and what is happening to them after they leave high school. This information provides states with information on how to improve programming and services as well as indicates compliance (Wehman, 2013b).

Indicator 13 is monitored yearly. The data is included in Part B reports to the United States Department of Education. If the Indiana Department of Education (IDOE) issues findings

of noncompliance; the local education agency (LEA) is required to correct the issue in noncompliance (Indiana Department of Education [IDOE], 2013). For school year 2009-2010 only 80.22% of IEPs were compliant with Indicator 13; and in school year 2010-2011, 84.05% of the IEPs were compliant (Indiana Department of Education [IDOE], 2012).

The Indiana Secondary Transition Resource Center (INSTRC) was formed to assist the State in timely compliance in addition to assisting schools with transition best practice. INSTRC works directly with LEAs to develop compliant IEPs, to develop action plans, and to support best practice in transition services and methods. It seeks to increase secondary and post-secondary outcomes for students with disabilities by supporting the Statewide Transition Forum. In addition, INSTRC is building capacity at the state level to support evidence-based practices to promote successful transition planning, programming and services (INSTRC, n.d.). INSTRC has embedded transition requirements into Indiana's IEP system to assist with compliance (IDOE, 2012).

Indiana's special education is divided into seven roundtables. Each roundtable has a member representation in a transition cadre. Each cadre determined strengths and needs to develop transition education services. From this, each cadre is developing a resource, product, or idea to assist teachers in successful transition planning (INSTRC, n.d.). One of the most promising tools has come from the Northeast Roundtable. This cadre hopes to have an online matrix assessment tool developed for teachers to use in implementing transition goals and services. It will have a variety of assessments to use for students with all different disabilities in the areas of employment, independent living, and post-secondary education (J. Schmarlzreid & R. Thompson, personal communication, January 16, 2013).

The Central Roundtable cadre is focused on developing opportunities for families to develop knowledge of transition planning and services. The East Roundtable cadre will be reviewing self-determination curricula and strategies. The North Central Roundtable cadre will research barriers to successful vocational rehabilitation services and establishing best practices about implementing vocational rehabilitation services. The work continues with vocational rehabilitation with the Northwest Roundtable cadre. They are developing a decision-making tree to assist teachers in understanding vocational rehabilitation and are also developing an Excel spreadsheet to internally track individual students from referral to successful employment. The Southeast Roundtable cadre will be creating a brochure to be given to parents prior to case conferences. This is to assist the families in full participation in the case conference. The Southwest Roundtable cadre will be identifying transition related events, projects, and activities. They will also be developing a parent survey to obtain useful information for the transition process (INSTRC, n.d.).

Concerns surround the continuing of these statewide efforts. It was recently announced funding for INSTRC will cease in September 2013. Individual special education cooperatives will have to utilize professional development dollars to receive the technical assistance from INSTRC (personal communication with Nicole Norvell, February 22, 2013).

Kohler and Field (2003) wrote on information gathered regarding post-school outcomes for students with disabilities. Initiatives from federal legislation, federal, state, and local investment, and effective transition research were reviewed. The 1990 IDEA amendments helped frame the legal definition for transition. It specified the requirement of determining the interests and needs of the students. The 1997 amendments extended these requirements to include the transition service needs. This was the first time legislation stated the IEP of a student age 14 or

above should focus on postschool desires (Kohler & Field, 2003). By incorporating these three initiatives, transition programs and services grew stronger for students with disabilities. They effected the implementation of how transition programs would look (Kohler & Field, 2003).

Kohler and Field investigated effective transition practices in a three phase process. The investigations were organized in five categories: (1) student-focused planning, (2) student development, (3) interagency and interdisciplinary collaboration, (4) family involvement, and (5) program structure and attributes (Kohler & Field, 2003).

The ability to build and strengthen self-determination skills by activities and practice is an element of student-focused planning. One important thread throughout these activities is that decisions are based on student goals and interests. Students should have educational opportunities that support their career desires. These include academic as well as vocational classes. Self-determination skills are again an important thread in the student development phase. The academic arena is included, but so are leisure activities, independent living activities, and work-related activities. All of these are important for successful post-secondary transition. Opportunities should be given in the school environment as well as in the community. This thread additionally includes assessment and accommodations. These two pieces provide a framework for evaluating the learning experiences the student is having in the secondary setting. Furthermore, it will assist in successful transition (Kohler & Field, 2003).

The collaborative process brings together a variety of threads. Community organizations, local agencies, and businesses are all important elements of a transition-focused education. Interagency agreements must clearly define the roles and duties in the program of development. Clearly, the better the collaboration, the better the student is served. Furthermore, family involvement is an important piece and is tied to the collaborative process. The family

involvement focuses on “(a) participation and roles, (b) empowerment, and (c) training” (Kohler & Field, 2003, p. 178). Attendance, test scores, student confidence, and lower dropout rates are all improved when the family is effectively involved in the student’s educational process. The parents bring a unique lens to the transition planning team as they can provide information and guidance regarding skills outside of the academic arena with which the student may need assistance (Kohler & Field, 2003).

Information gathered from the parents may also provide insight on how the secondary school can better provide and develop transition services. For instance, the parents may suggest a need for better understanding of outside agency supports or resource fairs. Additionally, it is important to note the more personal the relationship is between the parent and the school, the better the transition services were implemented. The last category to be investigated was program structure. Program structures include features related to the effective delivery of transition-focused education and services. This includes philosophy, planning, policy, evaluation, and resource development (Kohler & Field, 2003).

An earlier investigation determined effective factors of model transition sites. These factors include:

- (a) incorporation of system wide, student, and family-centered strategies; (b) fostering of effective and substantive interagency collaboration; (c) facilitation of systematic professional development; (d) a visionary, supportive and inclusive form of leadership; (e) coordination of an integrated set of reform efforts; and (f) emergence of connections among a variety of local and federal transition initiatives (Hasazi, Furney, & DeStefano, 1999, p. 558).

Transition research continued to examine best practices; yet, post-school



outcomes, as identified in numerous follow-up studies and research, continued to significantly differ from the general education population. Research focused on teacher competencies through special education teacher programs. Kohler and Greene (2004) examined approaches to include transition-related content, transition-related teacher competencies and class activities, assignments, and reading transition-related content (Kohler & Greene, 2004).

Kohler's Taxonomy for Transition Programming (1996) continues to be the model of an exemplary transition program. It is a widely accepted framework for secondary transition programs. It was developed by a thorough review of the literature and analysis of other transition programs. Moreover, longitudinal studies, statistics, and research have provided evidence-based predictors (Family Empowerment and Disability Council [FEDC], 2011, p. 2).

### **Current Research**

Research continues to examine transition practices and programs for youth with disabilities. Cobb, Lehmann, Newman-Gonchar, and Alwell (2009) reviewed systematic reviews focusing on self-determination for youth with disabilities. What they discovered was self-determination is a multifaceted and complex construct. Positive outcomes for self-determination were best achieved by instructional and/or curricular interventions that have multiple components. While self-determination skills can be enhanced by focused instructional interventions, these are not enmeshed in academic packages (Cobb, Lehmann, Newman-Gonchar, & Alwell, 2009).

To ensure youth with disabilities had access to post-secondary education Shaw (2009) examined the access of two and four year colleges to students with disabilities. One critical need was to ensure parents and students have knowledge of post-secondary education in a timely fashion. Post-secondary education is a primary goal for 80% of secondary students with

disabilities. This is a clear indication secondary special education teachers need to have a goal pertaining to this need on every transition plan (Shaw, 2009).

The data indicated students with disabilities were interested in post-secondary education. They are participating in inclusive general education classrooms and graduating with a diploma. Colleges are developing programs and supports to assist students with disabilities; however, the laws pertaining to students with disabilities in high school and in post-secondary education are vastly different. IDEA is an entitlement law and Section 504 is a civil rights law. However, both require schools to provide individualized support to students with disabilities. In contrast, post-secondary institutions are covered under the Americans with Disabilities Act (ADA) and Part E of Section 504 of the Rehabilitation Act of 1973. There are vast differences in the responsibilities of the student in post-secondary education. Examples of these differences include the responsibility of the student for identification, evaluation, payment for evaluation, and course selection. The single most important difference between secondary and post-secondary institutions pertains to the structure and the ability to function independently. A successful college experience for youth with disabilities includes studying, seeking assistance, self-disclosing, advocating, and decision making skills (Shaw, 2009).

Parents are key members in the role of the student with disabilities secondary education. The parents are assured participation in the programming of their child's IEP. In post-secondary education, parents have little standing legally in the educational process. It is important to make sure parents are aware of the changes in the laws governing high school and college and assist parents in understanding the self-determination philosophy. At the college level, the law specifies the student is responsible for planning the program, presenting disability documentation, and requesting accommodations. It is important to encourage self-determination

and self-advocacy skills at the secondary IEP meetings. This will assist students in developing these needed skills for post-secondary success (Shaw, 2009).

Students with disabilities need to be made aware of the differences in accommodations. Colleges will deny unreasonable accommodations and any accommodations they feel lower the standards of the institution. It is imperative that IEP teams foster post-secondary success by using supports and accommodations that will be used in the post-secondary setting. It is also imperative secondary institutions take seriously the summary of performance (SOP). There is strong evidence to indicate that students with disabilities that have a well-developed SOP will have evidence for post-secondary accommodations. The SOP could potentially be an important piece of documentation for the post-secondary institution due to the fact it can detail specifically how the student's functional level is affected by his/her disability. This document also provides present levels of performance (Shaw, 2009).

Research has examined post-school outcomes and transition policy. A study was conducted to examine the methods researchers use to conduct follow-up studies on post-school outcomes. The study examined collection methods, sample characteristics, variables and identified post-school outcomes (Alverson et al., 2010).

The research found a variety of methods was used by the states to collect post-school outcome (PSO) data. The survey was the most common method, with interview surveys by telephone or face-to-face surveys, being the most reported. Other types of collection methods included a combination of interview methods such as mail, face-to-face and assessing student records. The majority, 60%, reported selecting the sample from part of a state or the entire state. The variables presented in this study included demographic characteristics of the youth in the

sample and the transition or service program. The most commonly reported PSO was employment followed by education and then independent living (Alverson et al., 2010).

The study found three important implications. First, collection methods for PSO data need to be inclusive and cost effective. One possible cost-effective method may be the recent federal requirement for states to come up with a longitudinal data system for the sole purpose of examining student PSO data. Second, the PSO data needs to be utilized by multiple agencies. It would be helpful if state agencies developed common definitions. An example would be for a state partnership with vocational rehabilitation to develop a definition for full-time employment. This universal definition would assist in describing employment rates for adults with disabilities. Third, collecting and reporting PSO data must address the issue of representativeness of the respondents to the target population. Key variables should include disability, gender, race/ethnicity, and methods of exiting school. This will assist in generalization of the findings so the data can be used with more confidence in improving transition programs (Alverson et al., 2010).

Hughes and Carter (2011) continued transition research focusing on needed supports. The disappointing outcomes of youth with disabilities over the past 20 years suggests a substantial number of schools are failing to implement IDEA legislation as it was intended. To strengthen post-school outcomes, they advocated the Transition Support Model. This model incorporates educational supports and skills needed by students for successful transition outcomes. An educational support emphasizes the fit between the student and the environment. Although there has been a plethora of effective instructional research methods in successful transition services, research addressing support is just now beginning to emerge. More research is needed to integrate evidenced-based practices with needed transition supports (Hughes & Carter, 2011).

Bouck (2011) presented an understanding of the educational programming for students with mild intellectual disabilities. The research conducted was a secondary analysis of the NLTS2 data in regards to curricular focus, course instruction, instructional setting, assessment participation, and parental satisfaction. Reported were a variety of responses for the curriculum for students with mild intellectual disabilities: 23.8% received a special education curriculum, 19% a functional curriculum, 15.3% a general education curriculum, 14.3% a lower grade curriculum, 13.8 a unique curriculum, 4.8% received no curriculum, and 1.1% received a vocational curriculum. In addition, teachers reported high school students with mild intellectual disabilities received core content instruction in the special education setting over 50% of the time. Instructional settings included (52.9%) self-contained setting, (26.9%) resource room, (6.9%) general education, (2.6%) vocational preparation, and (2.1%) co-taught class (Bouck, 2011).

Significant findings from the study indicated the majority of special education students with mild intellectual disabilities received instruction in core content subjects in the general education setting, although it should be noted this decreases by grade level. It was also found that students with mild intellectual disabilities were in general education for elective courses, students in the core content general education programs received substantial modifications, and 75% of students with mild intellectual disabilities took some type of standardized assessments with accommodations, and finally parents were satisfied with their child's education (Bouck, 2011).

The study revealed the education of students with mild intellectual disabilities is in a confused state. High school students with mild intellectual disabilities were primarily being served in a special education setting. This setting does not allow for adequate preparation for

mandated state assessments. Furthermore, the core content area of general education curriculum was to prepare students for post-secondary education. Recent data indicated youth with mild intellectual disabilities were not attending post-secondary education (Bouck, 2011).

Morningstar et al. (2012) reviewed and identified secondary education initiatives that support transition principles. Three specific recommendations were given to improve transition services and programs. The first recommendation stated that policy and practices should align with current education reforms. The key issue to be addressed was that high school students were not adequately prepared for postsecondary education or the world of work (Bangser, 2008). Since transition skills have evolved from being provided by special education personnel to be delivered by general education personnel, reauthorizations of IDEA need to “provide strong conceptual language that mirrors secondary reform while keeping true to the tenets of the provision of transition services” (Morningstar et al., 2012, p. 137). Reform efforts need to blend in order for transition services to be provided for all students (Morningstar et al.).

The second recommendation was for transition practitioners to engage secondary educators. The pathway to adulthood needs collaborative support by school, family, and agencies. However, since special education remains a separate system, it still has the major responsibility of transition. However, indicators show little more than paper compliance. General educators and special educators must be willing to collaborate in the delivery of transition services and programs (Morningstar et al., 2012). Secondary special education already supports recommendations for transforming high schools. These recommendations include aligning relevant graduation standards and high school curricula in addition to engaging students with employers and postsecondary institutions (Bangser, 2008).

Transition services must include tiered intervention programs within secondary school settings. This would include integrating resources to assist with building capacity for general and specialized education supports in educational settings and with community agencies. In addition, progress monitoring would include academic and behavior data but would also integrate data that would influence graduation, drop-out, suspension/expulsion rates, and post-school outcomes. Transition improvement must align educational initiatives to develop specialized services needed to support students (Bassett & Smith, 1996; Morningstar et al., 2012).

The final policy recommendation was for educators to work closely with families and students to ensure their voices were heard. Transition is a student-centered process. Self-determination instruction results in students acquiring foundational skills to promote self-determination in addition to increasing their academic goal achievement and access to the general education curriculum (Cobb et al., 2009). Furthermore, family support was associated with the ability of students with disabilities to achieve post-school outcomes, which included employment, post-secondary education, independent living, and community involvement. Given this information, school leadership must find strategies to increase family involvement (Morningstar et al., 2012).

NSTTAC (2012) prepared a report on the gaps and challenges of transition to college and careers. Five major recommendations to improve transition services and programs came out of the report. The first recommendation included several mandates that would have the ability to change rules and regulations influencing education and adult service at all levels. Proposed mandates would include requirements for common disability definitions and the elimination of disability designation. Furthermore, teacher credential requirements should better align with competencies relevant to transition services, and federal monitoring must shift focus from

compliance to outcomes. The second recommendation involved federal agencies providing incentives to develop and expand curricula for students to experience career exploration and development. Furthermore, incentives are needed to expand research on employment models that integrate transition resources with educational systems (National Secondary Transition Technical Assistance Center [NSTTAC], 2012).

Capacity building was the third recommendation. This entails professional development that focuses on pedagogy, cultural competence, and evidence-based practices. Moreover, there is a need to identify cross-disciplinary competencies into preparation programs and utilizing technology for training and coaching. The fourth recommendation was a variety of systems change. This involved changing the dynamics of personnel preparation, models for funding, accountability systems, and service delivery. Furthermore, the need to align definitions across agencies was recommended (National Collaborative on Workforce and Disability for Youth [NCWD], 2012).

The most important recommendation was the need to have high expectations for all students. This will provide a foundation to prepare youth with disabilities for college and careers. This perspective is fundamental to the expectation that we can create an ideal system that builds and fosters self-determination; engages families; is accountable, unified, inclusive and seamless; depends on valid and reliable data; and is driven by caring and competent personnel (NCWD, 2012, p. 16). By having high expectations, college and career dreams are achievable for youth with disabilities.

### **Summary**

Secondary transition has been defined and shaped by laws, mandates and



best practice models (IDEA, 2004, Kohler & Field, 2003, Will, 1984). These mandates helped in framing the development of transition services for SWD. Additionally, they focused on the need to create quality transition programs and services. Since IDEA (1990) transition has been an integral piece in the education system (Morningstar et al., 2012). Special education personnel have been challenged to meet the transition needs of SWD. With this focus came the need for special education personnel to create innovative transition programs, increase collaboration with outside agencies, and provide employment opportunities and experiences. An effective transition program meets the needs of SWD through a wide variety of activities. However, after more than two (2) decades of mandates and legislation, SWD continue to have poor post-school outcomes (Morningstar & Kleinhammer-Tramill, 2005). Furthermore, post-school follow up studies and longitudinal studies still show students with disabilities struggle with transition outcomes. The NLTS2 students with disabilities are significantly behind their general education peers in obtaining employment and post-secondary education. State indicators demonstrate transition compliance is poor. In the state of Indiana, 32% of students with disabilities were graduating with a diploma, 7% were receiving some form of certificate and 15% were dropping out (National Council on Disability [NCD], 2011, p. 63). It appears that even with legal mandates and the review of indicators SWD are still struggling with access to employment, post-secondary education, and independent living.

The literature has demonstrated there are a wide variety of transition models with which to assist students with disabilities. Beginning with Will (1984) and Halpern (1985) seamless transition was advocated for youth with disabilities. Their work provided models for effective transition programming and services. In addition, research described the key elements needed to implement transition programs for students with disabilities (SWD). An organizing structure for

transition programs was created. Each of the five (5) areas was divided into subcategories, with descriptions of the necessary transition practices (Kellems & Morningstar, 2010; Kohler, 1996). Studies were conducted to determine the essential elements for transition planning. There was focus on the transition planning process and guidelines were developed for meaningful transition goals (Mazzotti et al., 2009). All data, research, and studies indicated the need to better prepare SWD for positive post-school outcomes. Moreover, studies reported that effective programs should begin for SWD early in the secondary setting (Brolin, 1992; Kohler, 1996). Research has indicated that post-secondary outcomes improve for SWD when evidenced-based practices are put into place (Test et al., 2009). However, there has been little research on how these models have been put into practice.

A total of 37.6% of SWD in were enrolled in a two or four year college or university, and only 16.0% of SWD were enrolled in some other form of post-secondary education, excluding two or four year colleges and universities according to the Indiana Post School Follow Up Survey (2012). Furthermore, only 28.1% of SWD were competitively employed (Spradlin & Hiller, 2012). The research in the field indicated that further research was needed to examine the current perception of transition in the state of Indiana. Emphasis needs to focus on how to better meet the transition needs of students with disabilities in the secondary setting. Special education personnel will need to deliberately develop evidenced-based predictors for successful transition.

### **Chapter Three - Methodology**

#### **Purpose**

The purpose of this study was to examine the perceptions of special education directors, assistant directors/program coordinators, and secondary special education teachers concerning the current knowledge, usage, and effectiveness of 16 evidenced-based transition predictors at

the high school level in the state of Indiana and the impact the predictors had on post-school outcomes for SWD. The study also examined the barriers to positive post-school outcomes faced by secondary SWD including paid employment/work experiences, inclusion in the general education setting, self-care/independent living skills, self-determination, and parental involvement. Ultimately, the study was conducted to determine to what extent the 16 evidenced-based transition predictors were being utilized in high schools in the state of Indiana to help transition secondary special education students to post-secondary education, employment, and adult life.

### **Sample**

The population for this study was drawn from all 92 counties in Indiana. This included all 296 school corporations and 67 special education cooperatives servicing students with special needs. Participants for this study were special education directors, assistant directors and/or program coordinators, and secondary special education teachers in grades 9-12 working in public high schools and/or teachers in grades 7-12 working in junior-senior high schools secondary settings in Indiana. The researcher used the Indiana Department of Education (IDOE) website and the Indiana Council of Administrators of Special Education (ICASE) to obtain potential participants. The research focused on a population of interest targeted at directors of special education, their assistant directors and/or program coordinators and the secondary special education teachers working in their school cooperatives/corporations. The study design was developed to include an approximate 500 participants in the sample.

### **Sampling Method**

Participants were selected using a multi-stage sampling approach. Multi-stage sampling designs can involve simple, stratified, and systematic sampling (Trochim, 2006). This study used

all three types of the multi-sampling design: simple, stratified, and systematic. This multi-phased sampling method produced approximately 500 sample subjects in the state of Indiana.

The third stage involved identifying school corporations aligned with the directors of special education identified in the sample. The researcher needed to identify all school corporations that fell under the administration of program services related to special education under the supervision of the director of special education identified in the study. This was needed to identify the specific high schools and/or junior-senior high schools within each of the school corporations. Permission letters were then sent to superintendents of the corporation. Once permission from the superintendent was received, a permission letter was sent to the building level principal. Once the building level principal gave consent, all secondary special education teachers within the high school setting were identified. There were an anticipated 256 school corporations, 271 high schools, and an approximate number of 492 special education teachers at the secondary level.

### **Research Design**

This study incorporated a mixed method research design as the findings included both quantitative data and qualitative data (Creswell, 2009). The design included forced choice survey questions with data interpreted through descriptive and inferential statistical data analysis (parametric and non-parametric) in addition to five open-ended questions. The open-ended questions were added to the design due to the fact qualitative research allowed for the benefit of providing a level of knowledge related to the perceptions of the evidenced-based transition predictors as well as the utilization of those predictors in practice. The mixed method design allowed the researcher to obtain a broader set of information. This also allowed the study to have explanatory power in addition to implications for practice (Connelly, 2009). The majority of this

study was quantitative and measured perception of specific transition practices; a need to ask questions with a less measurable quality allowed participants to provide insights for future practice in a comprehensive and in-depth manner (Gelo, Braakman, & Benetka, 2008).

The quantitative portion of the research allowed for examining the relationship among the variables. The variables were measured so the data can be analyzed utilizing statistical procedures. The qualitative portion of the research provided a means to explore and understand the meaning groups ascribe to a problem. Data analysis built from general themes and the researcher making interpretations of the meaning. This survey research used random sampling that is often used in quantitative research. However, to have purposeful sampling a stratified system was also used for the qualitative data collection (Creswell, 2009).

The independent variables in this study were the role of the participants (i.e. directors of special education, assistant directors/program coordinators, and secondary special education teachers), and the 16 evidenced-based predictors. The independent variables were those that “cause, influence, or affect the outcomes” (Creswell, 2009, p. 50). The dependent variables were the perceptions of the knowledge, use, effectiveness, and post-school impact of the 16 evidenced-based predictors as described by directors of special education, assistant directors/program coordinators, and secondary special education teachers. Dependent variables depend on the independent variables; these are the outcomes of the influence of the independent variables (Creswell, 2009).

### **Instrumentation**

A survey was designed in Ball State University Qualtrics. A survey research design was determined to be the best model to conduct this study. This allowed for a description of “trends, attitudes or opinions of a population” (Creswell, 2009, p. 12). The development of the survey

instrument utilized key information and skills found in the literature review (Test et. al, 2009b). Test et al., 2009b, conducted a systematic literature review of secondary transition correlational literature. It examined in-school predictors that could improve post-school outcomes in the areas of employment, education, and/or independent living. The questions in this survey used predictors found in the literature review (Test et al., 2009b) and assessed the perceptions of the knowledge, use, and effectiveness of those predictors from three different groups: (1) special education directors, (2) assistant directors/program coordinators, and (3) secondary special education teachers. In addition, five predictors were assessed to examine the barriers to positive post-school outcomes faced by secondary SWD including paid employment/work experiences, inclusion in the general education setting, self-care/independent living skills, parental involvement, and self-advocacy/self-determination. These five predictors were chosen from literature reviews and personal communication (Test et al., 2009b, Landmark et al., 2010, M. Conrad, personal communication, February 11, 2013) as being the most substantiated to improve post-school outcomes.

The survey instrument was designed by this researcher using Qualtrics. The survey was developed using the sixteen evidenced-based transition predictors from the literature review and five open-ended questions. It was disseminated electronically via email to study participants with a website link embedded in the email. The URL allowed access to the survey in BSU.Qualtrics.com. The survey allowed for obtaining demographic information and incorporated different types of questions: Likert-type scale design, yes/no/do not know questions, and open-ended responses. Each survey was coded to protect confidentiality and allow for study management. Only the researcher and faculty advisor had access to the survey data and study coding design.

**Section I.** The first section of the survey contained information about the survey. Its focus was on the interest of gaining perceptions of special education directors, special education secondary teachers and special education assistant directors and/or program coordinators in the knowledge, use, effectiveness, and impact on post-school outcomes of 16 evidenced-based transition predictors. It also provided informed consent. It encouraged the potential respondent's participation and gave a date to complete the survey.

**Section II.** The second section of the survey obtained demographics. It asked questions regarding gender, age, and current position. In addition, the survey asked questions about educational attainment, years in current position, and years with current employer. Questions also addressed years in the field of education, description of the special education cooperative, and size of the cooperative.

**Section III.** The third section surveyed the knowledge of evidenced-based transition predictors. The intent was to investigate the knowledge of evidenced-based transition predictors by special education directors, assistant directors/program coordinators, and special education teachers with regards to the 16 evidenced-based transition predictors by using a 5-point Likert scale. Participants were asked to rate the knowledge of the predictors by indicating 1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree, and 5 = no knowledge.

**Section IV.** The fourth section surveyed the usage of evidenced-based predictors in secondary special education programs. The intent was to investigate the utilization of the 16 evidenced-based transition predictors by special education directors, assistant directors/program coordinators, and special education teachers by asking a yes/no/do not know question.

**Section V.** The fifth section surveyed the perceived effectiveness of implementation of evidenced-based predictors in secondary special education programs. The intent was to

investigate the perceived effectiveness of the 16 evidenced-based transition predictors by special education directors, assistant directors/program coordinators, and special education teachers with regards to the evidenced-based transition predictors using a 5-point Likert scale. Participants were asked to rate the usage of the predictors by indicating 1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree, and 5 = no knowledge.

**Section VI.** The sixth section surveyed the perceived impact the evidenced-based transition predictors had on post-school outcomes by using a 5-point Likert scale. Participants were asked to rate the usage of the predictors by indicating 1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree, and 5 = no knowledge.

**Section VII.** This section had five open-ended questions that were used to provide supplemental data. It allowed the survey participants to comment on the barriers and complications of the effectiveness and utilization of paid employment/work experiences, inclusion in the general education, self-care/independent living skills, and parental involvement in the transition predictors.

### **Survey Development and Review**

**Jury Panel.** This survey instrument was disseminated to a jury panel of state and national subject matter experts in transition services and programs to obtain feedback on its face and construct validity. Included in the jury panel were three (3) national level experts in the field of transition and three (3) state level experts in the field of transition. Each jury panel member was asked to review and to provide feedback on the formatting, question design, and overall usefulness. Their feedback was used as a reference for redesign and revision of the survey instrument. The review of the jury pool resulted in no changes or rewriting of the survey questions.



**Pilot Testing.** The survey instrument was piloted to test for content validity and consistency as well as readability, user-friendliness, and to obtain an average time for completion. The pilot study provided the researcher with a small scale trial run. A pilot study can greatly increase the likelihood of success in the main study (Simon, 2011). The survey group consisted of 25 university faculty and graduate students in the field of special education in addition to two (2) current assistant special education directors, one (1) retired special education program coordinator, and seven (7) current secondary teachers of special education. The pilot test was a sample of convenience. The data provided from the pilot testing assisted in obtaining insight to the use of the electronic system, any technology barriers, and the time commitment needed to complete the survey. Participants were also given the opportunity to provide comments on the ease of use of the survey and any suggestions for improvement. Feedback included suggestions on wording in order to bring clarity to the survey. This resulted in minor editing of the survey instrument with regards to spelling and grammar. No major deficiencies were found in the instrument. Furthermore, no flaws were found in the collection, delivery, or statistical analysis process. The pilot data was not used for the dissertation research study.

### **Survey Procedures**

An electronic format was used for the survey to ease the distribution. The Qualtrics software program, housed on servers at Ball State University, was used for the design, distribution, and collection of the survey data. The Qualtrics program created a link that was e-mailed to potential participants. The only action that was required by the potential participants to begin the survey process was to open the e-mail they received from the researcher and click on the link. The Qualtrics program had a letter of informed consent per IRB and electronic agreement for participation before opening the survey. If the participant marked yes, then the

participant was allowed to take survey. If the participant marked no, he/she was thanked for his/her time and then exited the survey.

The researcher made contact with special education directors by electronic e-mail from the random number sampling. The electronic invitation described the identity of the researcher, explained the study, and asked if they were willing to participate and gave them the link in order to make an informed decision about participating in the survey. If, after the initial e-mail, the researcher had not heard from the directors in three days, a second e-mail was sent. The researcher waited two days; if there was no response, and then a telephone call was made. Telephone contact was initiated three times. If no contact had been made, the director was crossed off the list.

The next step was to obtain the assistant director/program coordinator contact information. In addition, the researcher asked the directors of special education to communicate the principles of the study and share contact information so the researcher could forward to the superintendents a similar letter with a link to the survey for them to approve. If there was no response to the first e-mail, a second e-mail was sent five days later. If contact had not been made, two telephone calls were made. If no contact had been the made, the researcher potentially called the special education director for additional support.

If the superintendent gave approval, the high school principal was contacted. Permission had to be given by the high school principals on their school letterhead. The researcher forwarded to the principals a similar letter with a link to the survey for them to approve. If after the initial e-mail, the researcher had not heard from the directors in three days, a second e-mail was sent. The researcher waited two days; if there has been no response, then a telephone call

was made. A telephone contact was attempted three times. If there had been no contact with the principal, the researcher contacted the director of special education for assistance.

Upon receipt of permission, the building level principal was asked for permission to survey the special education teachers in his/her building. The school (1) could send a faculty directory that contained the first and last name of the secondary special educators and their e-mail addresses, or (2) the researcher asked for a web address for their site and created the list utilizing the staff directory and contact information provided. From these two options, the researcher was able to obtain the total of secondary special education teachers. Once this was completed, the researcher built a database in Qualtrics and the survey was sent. The participants had the option to take the survey or to opt out of the survey. The study timeline was eight weeks. It began November 5, 2013 and ended December 31, 2013. Two weeks after the initial e-mailing of the survey link, a reminder e-mail was sent. This cycle repeated with a second reminder after a two-week period, and a final e-mail announced the close of the survey. Qualtrics is designed to send out reminder e-mails only to those who have not responded.

## **Analysis**

### **Data Analysis**

Responses to transition evidenced-based predictors were as the perceptions of level of effectiveness and knowledge were analyzed using SPSS (IBM SPSS 22.0). The independent and dependent variables were presented and outlined to provide insight into the analysis process.

**Independent Variables.** An independent variable is thought to be the cause of some effect. It denotes a variable that the experimenter has manipulated (Field, 2009, p. 7). The independent variables in this study were the 16 transition evidenced-based predictors and the

employed position held by the participants. The positions were (a) special education directors, (b) assistant directors/program coordinators, and (c) secondary special education teachers.

**Dependent Variables.** The dependent variable is thought to be affected by changes in an independent variable (Field, 2009, p. 7). The dependent variables in this study were (1) the knowledge of evidenced-based transition predictors, (2) the use of evidenced-based transition predictors, (3) the level of effectiveness of the evidenced-based transition predictors, (4) the impact of evidenced-based transition predictors on post-school outcomes, and (5) barriers and complications to the implementing five evidenced-based transition predictors.

### Summary

The study used a state-based population and sample design focused on directors of special education, their assistant directors/program coordinators, and the special education teachers working in their associated secondary schools. The survey was designed by the researcher and presented in electronic form (BSU Qualtrics) for distribution and data collection. The analytic plan included IBM Statistical Program for Social Sciences (IBM SPSS 22.0) a statistical computer software program used for all data analysis. SPSS is a statistical package used for statistical analysis data. Although the majority of the study was quantitative and measured perceptions of the 16 evidenced-based transition predictors, there was need to ask open-ended questions to allow the respondents to provide insight for qualitative analysis. First, descriptive statistics were used to measure and describe demographic variables (e.g., gender, age, years of experience, employment role, and employment setting). Descriptive statistics included the frequency of responses, means of response groups, and the standard deviation of responses. Three questions involved interval responses: (a) What is your age?, (b) How many years have you been at your current position?, and (c) How many years of experience do you have working

in the field of education? All of the other response items had a single choice and a distinct coded value. A table displayed the  $N$  (frequency) and the percentages (proportionate ratio of the number within each group by category).

The measure of central tendency was the mean and standard deviation. This was used because it is the measure that considered all scores and was the most stable measure. The mean also provided a foundation for further evaluation using inferential statistics that may be limited when using other measures of central tendency (Welkowitz, Cohen, & Ewen, 2006). The standard deviation of responses was also calculated. This served two purposes: (a) to display any variability of responses, and (b) to provide information for using inferential statistical analysis. The standard deviation was useful due to its relationship to the normal distribution (McMillan, 1996).

The inferential statistics were parametric which included one-way Analysis of Variance (ANOVA) with post-hoc Bonferroni test. The ANOVA test must meet four basic assumptions: (1) normally distributed data; (2) homogeneity of variance; (3) interval data; and (4) independence (Field, 2009). If there was equal variance, the researcher reported ANOVA with an *F-statistic*. An ANOVA produced an *F-statistic*. This compared the amount of systematic variance in the data to the unsystematic variance (Field, 2009). The Levene's test was conducted to determine equal variance. If there was equal variance, the post-hoc Bonferroni test was conducted. The Bonferroni is the most common procedure for "finding the most appropriate alpha for each of several priori comparisons" (Welkowitz et al., 2006, p. 325). If the data did not have equal variance, then the data analysis used was the ANOVA Welch test, and the post-hoc test was the Tamhane 2. In addition, if the data did not meet the four assumptions, the researcher explored non-parametric analysis using the Kruskal-Wallis test which reported the  $H$  statistic

based on mean ranks. The Kruskal-Wallis test, examines differences by mean ranks and generates an  $H$  statistic which has approximately a chi-square distribution and is reported as a chi-square statistic ( $\chi^2$ ) (Welkowitz, Cohen, & Ewen, 2006).

Logistic regression models were used to determine if any demographic variable (gender, age, position, and years in position) was viewed as a critical predictor variable within the study. Respondent positions were defined on the basis of his/her current position. The positions were divided into three (3) categories: (a) special education director, (b) special education assistant director/program coordinator, and (c) secondary special education teacher. Age groups were divided into three (3) groups: (a) 20-40 years old, (b) 41-50 years old, and (c) 51+ years old. Furthermore, education level was divided by (a) bachelor level, (b) master's degree, and (c) advanced degrees. The last predictor variable analyzed was years in position. These were identified as: (a) 0-5 years, (b) 6-15 years, (c) 16-20 years, and (d) 20+ years. Chapter 4 provides a more comprehensive review of this data.

## **CHAPTER – 4 RESULTS**

This study sought to investigate the perceptions of special education personnel concerning the 16 evidenced-based transition predictors. The study examined the perceptions of (a) special education directors, (b) assistant directors/program coordinators, and (c) secondary special education teachers concerning their current knowledge, their school's usage of, and the overall effectiveness of 16 specified evidenced-based transition predictors at the high school level in the state of Indiana and their impact on post-school outcomes. The study also examined the barriers to positive post-school outcomes faced by secondary SWD including paid employment/work experiences, inclusion in the general education setting, self-care/independent living skills, self-advocacy/self-determination skills, and parental involvement. The research was

conducted in the state of Indiana. One-hundred three special education directors were invited to participate in the survey; 42 special education directors returned permission to participate, and 34 special education directors participated. Fifty-one assistant special education directors/program coordinators were invited to participate in the survey and 37 actually participated. A total of 49 superintendents were sent letters of permission for their corporations to participate and 43 permissions were returned. Additionally, 45 principals were sent permissions to participate and 41 responded. This results in 175 secondary special education teachers being invited to participate in the study and 111 completing the survey. The sampling procedure yielded 268 potential study participants that were sent invitations to participate via e-mail that included a survey link. There were a total of 197 (73.5%) partial responses received. All returned surveys with incomplete responses ( $n = 15$ ) were removed from the data set. The remaining 182 surveys were used for analysis and gave a 67.9% return rate. The final sample of usable surveys included responses from (a) 34 special education directors, (b) 37 assistant directors/program coordinators, and (c) 111 secondary special education teachers throughout the state of Indiana. This resulted in 182 usable responses. As indicated in Table 1 the study had a 67.9% return rate. The highest response rate was among special education directors (81.0%).

Table 1

*Return Rates for Special Education Directors, Assistant Directors/Program Coordinators, and Special Education Secondary Teachers*

Participation Classification	Number Sent	Number Returned	Return Rates
Special Education Directors	42	34	81.0%
Special Education Assistant Directors/Program Coordinators	51	37	73.0%

Table 1 *continued**Return Rates for Special Education Directors, Assistant Directors/Program Coordinators, and Special Education Secondary Teachers*

Participation Classification	Number Sent	Number Returned	Return Rates
Special Education Secondary Teachers	175	111	63.4%
Total	268	182	67.9%

*Note.* Percentages represent data reported by category.

The findings of this study were viewed as exploratory. The data analysis plan was organized and developed to answer 10 research questions. The questions were designed to capture the perceptions of special education directors, assistant directors/program coordinators, and special education secondary teachers in the state of Indiana concerning their knowledge of the 16 evidenced-based transition predictors (Test et. al., 2009b) and their utilization and perceived effectiveness of these transition predictors in their secondary school settings.

The analysis of the study data was completed using the Statistical Program for the Social Sciences 22.0 (SPSS, 2013) an IBM statistical software program. The findings reported as descriptive statistics included frequencies, percentages, means, and standard deviations. The inferential statistics are reported for respondents based on three groups (1) special education directors, (2) special education assistant directors, and (3) secondary special education teachers. It was critical to address four basic assumptions in reporting parametric statistics in subsequent tests for significance: (1) normal distribution of the independent variable; (2) independence of subjects; (3) equal variances of groups (Levene's Test of Homogeneity of Variances); and 4) independence (Field, 2009). The assumption of normal distribution was met using the Q-Q plot. This identified normal distribution on all variables. The assumption of independence of subjects



was met by allowing subjects to complete the survey confidentially by using a coded link via the Internet. The assumption of equal variance was tested by using Levene's Test of Homogeneity of Variance and identifying variables with unequal variance significant at the  $p < .05$  level. Internal data was tested by utilizing a four-point Likert scale reported for inferential statistics per explanation below. Questions 12a-27a and 12b-27b were answered using this scale. The lowest point on the scale (1) was classified as strongly disagree (0-25%). The second point on the scale (2) was classified as disagree (26-50%). The next point on the scale (3) was classified as agree (51-75%). The highest point on the scale (4) indicated strongly agree (76-100%). The fifth point on the scale was (5) do not know. The survey items where some respondents indicated "Do Not Know" were accounted for as descriptive data. The item responses "Do Not Know" were recoded as system missing by SPSS for the purposes of statistical analysis. Thus, the number five rating was eliminated for the reporting of statistical analysis for Likert-type scale items (e.g., M, SD, ANOVA) for the subsequent sections reported below (Table 4, 5, 8, and 10).

The data was collected and organized to answer the 10 research questions used to guide this study. The questions were created to address the perceptions of special education directors, special education assistant directors/program coordinators, and secondary special education teachers regarding the knowledge, utilization, effectiveness and impact of the 16 evidenced-based transition predictors. In addition, five research questions addressed the barriers to implementation of five of the 16 evidenced-based transition predictors.

Analysis was also completed based on respondents' position. Analysis of special education directors and special education assistant directors/program coordinators' responses should be considered exploratory in a nature. This is the first time research in Indiana has investigated the knowledge, use, effectiveness, and impact of the 16 evidenced-based transition

predictors in secondary education programs concerning best practice as identified by the National Secondary Transition Technical Assistance Center.

### **Internal Consistency**

To determine internal consistency as a measure of reliability for the survey instrument items, Cronbach's alpha ( $\alpha$ ) was utilized. Levels ( $\alpha$ ) at or above  $\geq 0.60$  are appropriate for research purposes (Institute for Digital Research and Education, n.d.). The questions in Section III of the survey regarding respondents' knowledge had a Cronbach's alpha equals .901. For questions concerning Section IV of the survey regarding respondents' perception of usage of the 16 predictors had a Cronbach's alpha equals .921. In addition, Section V of the survey regarding respondents' perceptions of the effectiveness of the 16 predictors related to post-school outcomes had a Cronbach's alpha equals .929. These measures indicated a high level of internal consistency and reliability for the 16 evidenced-based transition predictors.

### **Respondent Demographic Characteristics**

The first 10 questions of the survey (Section II) were designed to collect demographic data from all of the respondents. Table 2 reports the demographics of the study. The largest number of respondents were female ( $N = 150$ ). This is representative of the broader special education population. The largest age range of participants was 51-60 ( $N = 53$ ). The age range was not representative of the secondary special education teachers' position ( $N = 27$ ). Most participants ( $N = 84$ ) were working in a grade 9-12 high school setting. This is representative of the broader special education population as there are more educators than administrators. Roughly two-thirds of the respondents (65.4%) had a MA/MS degree ( $N = 119$ ). The majority of the respondents ( $N = 46$ ) had been in their current position between 6-10 years. Most respondents ( $N = 87$ ) had been in the field of education for more than 20 years. The majority of respondents

taught in a rural area ( $N = 98$ ) and most ( $N = 82$ ) described the size of their cooperative as medium.

Table 2

*Demographics Reported by Position*

		<u>Special Education Directors</u>		<u>Special Education Assistant Directors/ Program Coordinators</u>		<u>Special Education Secondary Teachers</u>		<u>Total</u>	
		<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>N</i>	%
What is your gender?	Male	7	20.6	6	16.2	19	17.1	32	17.6
	Female	27	79.4	31	83.8	92	82.9	150	82.4
What is your current age?	20-25 years	0	0.0	0	0.0	5	4.5	5	2.7
	26-30 years	0	0.0	1	2.7	17	15.3	18	9.9
	31-40 years	3	8.8	5	13.5	28	25.2	36	19.8
	41-50 years	12	35.3	12	32.4	28	25.2	52	28.6
	51-60 years	11	32.4	15	40.5	27	24.3	53	29.1
	61+ years	8	23.5	4	10.8	6	5.4	18	9.9
What is the status of your current position setting?	Special Education Cooperative	20	58.8	21	56.8	6	5.4	47	25.8
	LEA/School Corporation	14	41.2	13	35.1	1	0.9	28	15.4
	High School (grades 9-12)	0	0.0	0	0.0	84	75.7	84	46.2
	Junior-Senior High (grades 7-12)	0	0.0	3	8.1	20	18.0	23	12.6
	MA/MS degree	20	58.8	27	73	72	64.9	119	65.4
	Educational Specialist degree	7	20.6	8	21.6	1	0.9	16	8.8
	Doctoral Ed.D/Ph.D	7	20.6	0	0.0	0	0.0	7	3.8
How long have you been in your current position?	Less than 1 year	3	8.8	5	13.5	12	10.8	20	11.0
	1-2 years	3	8.8	6	16.2	13	11.7	22	12.1
	3-5 years	11	32.4	7	18.9	16	14.4	34	18.7

Table 2 *continued**Demographics Reported by Position*

		Special Education Directors		Special Education Assistant Directors/ Program Coordinators		Special Education Special Secondary Teachers		Total	
		<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>N</i>	%
How long have you been employed at your current corporation/coopera tive?	6-10 years	7	20.6	7	18.9	32	28.8	46	25.3
	11-15 years	6	17.6	3	8.1	9	8.1	18	9.9
	16- 20 years	1	2.9	5	13.5	11	9.9	17	9.3
	more than 20 years	3	8.8	4	10.8	18	16.2	25	13.7
	Less than 1 year	1	2.9	3	8.1	9	8.1	13	7.1
	1-5 years	9	26.5	6	16.2	28	25.2	43	23.6
	6-10 years	9	26.5	7	18.9	33	29.7	49	26.9
	11-15 years	4	11.8	2	5.4	15	13.5	21	11.5
	16-20 years	1	2.9	4	10.8	6	5.4	11	6.0
	more than 20 years	10	29.4	15	40.5	20	18.0	45	24.7
How long have you been in the field of education?									
	Less than 1 year	0	0.0	0	0.0	4	3.6	4	2.2
	1-5 years	0	0.0	0	0.0	14	12.6	14	7.7
	6-10 years	0	0.0	4	10.8	26	23.4	30	16.5
	11-15 years	2	5.9	4	10.8	15	13.5	21	11.5
	16-20 years	5	14.7	3	8.1	18	16.2	26	14.3
	more than 20 years	27	79.4	26	70.3	34	30.6	87	47.8
How would use you best describe your corporation/coopera tive?									
	Urban	2	5.9	4	10.8	13	11.8	19	10.5
	Suburban	13	38.2	13	35.1	32	29.1	58	32.0
	Metropolitan	2	5.9	3	8.1	1	0.9	6	3.3
	Rural	17	9.4	17	45.9	64	58.2	98	54.1
How would you best describe the size of your corporation/coopera tive?									
	Large (10000+ students)	5	14.7	7	18.9	8	7.3	20	11.0

Table 2 *continued**Demographics Reported by Position*

	<u>Special Education Directors</u>		<u>Special Education Assistant Directors/ Program Coordinators</u>		<u>Special Education Secondary Teachers</u>		<u>Total</u>	
	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>	<i>N</i>	<i>%</i>
Medium-Large (5000-9999 students)	10	29.4	14	37.8	24	21.8	48	26.5
Medium (1000-4999 students)	15	44.1	16	43.2	51	46.4	82	45.3
Small (less than 1000 students)	4	11.8	0	0.0	27	24.5	31	17.1

*Note.* Percentages represent data reported by category.

**Research Questions**

The findings of the research questions for this investigation (outlined in Chapter 1) are presented below. The first five research questions were answered by the quantitative portion of the survey. Analysis was conducted on respondent groups' perceptions of their knowledge of the 16 evidenced-based transition predictors in their secondary settings, the usage of the 16 evidenced-based transition predictors in their secondary settings, and the perceived effectiveness of the 16 evidenced-based transition predictors related to their impact on post-school outcomes. Qualitative analysis was conducted on five (5) open-ended questions regarding the barriers to (a) inclusion practices, (b) parental involvement, (c) self-advocacy/self-determination, (d) self-care/independent living, and (e) paid employment/work experiences. Central themes were identified for all open-ended questions in addition to other key points pertaining to each barrier.

Survey Section III, question 11, addressed respondents' knowledge of the 16 evidenced-based transition predictors. Respondents answered by forced choice: yes, no, or do not know. "Do Not Know" responses were initially collected to provide an overall perspective of areas in

which lack of knowledge could be an area of concern. These could be areas where potential professional development and/or training may be needed at the local level.

Survey Section IV, question 12-27, addressed the utilization of each of the 16 evidenced-based transition predictors. Respondents answered by forced choice: yes, no, or do not know. “Do Not Know” responses were initially collected to provide an overall perspective of areas in which lack of utilization could be an area of concern. Skip logic was embedded in the survey questions 12-27. Skip logic allowed the respondent to move forward based on a response of “No” or “Do Not Know.” If the respondent chose “No” or “Do Not Know,” he/she proceeded to the next question. If the respondents answered “Yes” to questions in Section IV, they were directed to questions 12a-27a regarding effectiveness and 12b-27b of the survey concerning impact of the 16 evidence-based transition predictors.

Questions 12a-27a and 12b-27b were answered by utilizing a five-point Likert scale. In addition, questions 12a-27a and 12b-27b also utilized skip logic. Skip logic allows respondents to jump to a future point in the survey based on specific conditions. For example, if the respondent answered “Yes” to question 12, he/she was moved forward to answer 12a and 12b. If the respondent answered “No” or “Do Not Know” to question 12 the respondent was directed to question 13. “Do Not Know” responses were removed from the data analysis to provide more detailed analysis by respondents who did not have knowledge of effectiveness or impact of the 16 evidenced-based predictors.

Because of unequal sample sizes and the response rate on certain survey sections (12a-27a and 12b-27b) (Tables 8, 10) differences in respondents’ position mean ranks were analyzed using the Kruskal-Wallis test. This test was utilized due to the fact it does not make any assumptions on the normality of data (Lund & Lund, n.d.).

### Research Question 1

What level of knowledge of evidenced-based transition predictors do directors of special education, assistant directors/program coordinators, and secondary special education teachers possess?

Tables 3 represents the respondents who selected “Do Not Know” to the comprehensive knowledge of any of the 16 evidenced-based transition predictors. Respondents had good knowledge of the items identified that were associated with the 16 predictor variables. The percentages of respondents who indicated “Do Not Know” to predictors ranged from 0.0% to 2.2%.

Overall, one respondent did not have knowledge of (a) career awareness, (b) inclusion practices, and (c) programs of study. Two of the respondents did not have knowledge of (a) occupational courses, (b) paid employment/work experiences, (c) strong student support, (d) vocational education, and (e) strong transition program. Three total respondents did not have knowledge of (a) self-advocacy/self-determination, (b) self-care independent living, and (c) social skills. Four respondents did not have knowledge of (a) active parental involvement, and (b) exit exam/high school diploma. Of the remaining items, (a) community awareness, (b) inter-agency collaboration, and (c) work study programs, none of the respondents indicated they had no knowledge.

Table 3

*Respondents’ “Do Not Know” Responses to Comprehensive Knowledge of Evidenced-Based Predictors Based on Position*

<u>Special Education Directors</u>	<u>Special Education Assistant Directors/Program Coordinators</u>	<u>Special Education Secondary Teachers</u>	<u>Total</u>
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Table 3 *continued**Respondents' "Do Not Know" Responses to Comprehensive Knowledge of Evidenced-Based Predictors Based on Position*

	<u>Special Education Directors</u>		<u>Special Education Assistant Directors/Program Coordinators</u>		<u>Special Education Secondary Teachers</u>		<u>Total</u>	
<i>I have comprehensive knowledge of...</i>	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>	<i>N</i>	<i>%</i>
Career Awareness	0	0.0	0	0.0	1	0.9	1	0.5
Community Awareness	0	0.0	0	0.0	0	0.0	0	0.0
Inclusion Practices	0	0.0	0	0.0	1	0.9	1	0.5
Inter-agency Collaboration	0	0.0	0	0.0	0	0.0	0	0.0
Occupational Courses	0	0.0	0	0.0	2	1.8	2	1.1
Paid Employment/Work Experiences	0	0.0	0	0.0	2	1.8	2	1.1
Active Parental Involvement	0	0.0	1	2.7	3	2.7	4	2.2
Programs of Study	0	0.0	0	0.0	1	0.9	1	0.5
Self-advocacy/Self-determination Skills	0	0.0	1	2.7	2	1.8	3	1.6
Self-care/Independent Living Skills	0	0.0	1	2.8	2	1.9	3	1.7
Social Skills	0	0.0	1	2.7	2	1.8	3	1.7
Strong Student Support	0	0.0	1	2.7	1	0.9	2	1.1
Strong Transition Program	1	2.9	0	0.0	1	0.9	2	1.1
Vocational Education	1	2.9	0	0.0	1	0.9	2	1.1
Work Study Programs	0	0.0	0	0.0	0	0.0	0	0.0
Exit Exam/High School Diploma	0	0.0	2	5.6	2	1.8	4	2.2

*Note.* Percentages represent data reported by category and total for "Do Not Know" responses.

Table 4 presents the perceptions of knowledge of the evidenced-based predictors based on respondent groups and exploration of group differences. Respondents agreed ( $M = 3.06-3.16$ ) that they had comprehensive knowledge of career awareness. There was no significant difference reported ( $F = 0.31, df = 2, p > .05$ ). In the area of community awareness, respondents' agreed ( $M = 3.00-3.22$ ) that they had comprehensive knowledge. There was no significant difference reported ( $F = 1.63, df = 2, p > .05$ ). Concerning occupational courses, respondents agreed ( $M = 3.00-3.16$ ) that they had comprehensive knowledge. No significant difference was reported ( $F =$



0.70,  $df=2$ ,  $p > .05$ ). Respondents agreed ( $M = 2.86-3.16$ ) that they had comprehensive knowledge of paid employment/work experience. There was no significant difference reported ( $F = 2.49$ ,  $df = 2$ ,  $p > .05$ ). With active parental involvement, respondents agreed ( $M = 3.22-3.39$ ) that they had comprehensive knowledge. No significant was difference reported ( $F = 0.70$ ,  $d = 2$ ,  $p > .05$ ). Respondents agreed ( $M = 3.21-3.38$ ) that they had comprehensive knowledge of programs related to study. There was no significant difference reported ( $F = 0.89$ ,  $df = 2$ ,  $p > .05$ ). Respondents agreed ( $M = 3.38-3.48$ ) that they had comprehensive knowledge of self-advocacy/self-determination. There was no significant difference was reported ( $F = 0.44$ ,  $df = 2$ ,  $p > .05$ ). In the area of self-care/independent living, respondents agreed ( $M = 3.32-3.54$ ) that they had comprehensive knowledge. No significant difference was reported ( $F = 1.22$ ,  $df = 2$ ,  $p > .05$ ). Agreement was found in the area of comprehensive knowledge of social skills ( $M = 3.46-3.61$ ). There was no significant difference reported ( $F = 1.09$ ,  $df = 2$ ,  $p > .05$ ). Moreover, respondents agreed ( $M = 3.35-3.50$ ) that they had comprehensive knowledge of strong student support. There was no significant difference reported ( $F = 0.86$ ,  $df=2$ ,  $p > .05$ ). Likewise, respondents agreed ( $M = 3.05-3.19$ ) that they had comprehensive knowledge of vocational education. There was no significant difference reported ( $F = 0.56$ ,  $df = 2$ ,  $p > .05$ ). Additionally, respondents agreed ( $M = 3.39-3.59$ ) that they had comprehensive knowledge of exit exam/high school diploma requirements. There was no significant difference reported ( $F = 1.27$ ,  $df = 2$ ,  $p > .05$ ).

Respondents tended to agree that they had comprehensive knowledge of inter-agency collaboration ( $M = 2.74-3.03$ ). A significant difference was reported ( $F = 5.71$ ,  $df = 2$ ,  $p < .01$ ) among respondents for this question. Bonferroni post-hoc tests ( $p < .05$ ) found that special education assistant directors/program coordinators had higher ratings, indicating more agreement

concerning their knowledge of inter-agency collaboration, compared to secondary special education teachers (.399). The effect size (.30) was medium.

In the area of comprehensive knowledge of elements of a strong transition program, respondents tended to agree ( $M = 3.10-3.46$ ). A significant difference was reported ( $F = 4.64, df = 2, p < .05$ ). Bonferroni post-hocs at .05 found that special education assistant directors/program coordinators had higher ratings, indicating more agreement that they had comprehensive knowledge of elements of a strong transition program, compared to secondary special education teachers (.358). The effect size (.10) was small.

In addition, respondents tended to agree that they had comprehensive knowledge of elements of work-study programs ( $M = 2.81-3.12$ ). A significant difference was reported ( $F = 3.68, df = 2, p < .05$ ) for respondents on this question. ANOVA accounts for three or more groups and are a more robust test allowing for post-hoc analysis. The ANOVA found statistical differences at the level of  $p < .05$  on this item. Bonferroni post-hoc tests found no statistical significant difference between groups. When directors and assistant directors/program coordinators were compared, there was no difference. Likewise, a comparison of directors and special education teachers indicated no difference. In addition, there was no difference found between assistant directors/program coordinators and teachers. The effect size (.20) was small.

Table 4

*Perceptions of Knowledge of Evidenced-Based Predictors Based on Position*

	<u>Special Education Directors</u>			<u>Special Education Assistant Directors/ Program Coordinators</u>			<u>Special Education Special Secondary Teachers</u>			<u>Total</u>					
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>df</i>	<i>F</i>	<i>Cohen's f</i>
<i>I have comprehensive knowledge of...</i>															
Career Awareness	34	3.06	0.55	37	3.16	0.60	110	3.14	0.60	181	3.13	0.59	2	0.31	0.06
Community Awareness	34	3.09	0.54	37	3.22	0.63	111	3.00	0.69	182	3.06	0.64	2	1.63	0.14
Inter-agency Collaboration	34	3.03	0.72	37	3.14	0.71	110	2.74	0.67	181	2.87	0.71	2	5.71**	0.30
Occupational Courses	34	3.00	0.65	37	3.14	0.71	109	3.16	0.67	180	3.12	0.67	2	0.70	0.09
Paid Employment/Work Experiences	33	2.94	0.56	37	3.16	0.69	108	2.86	0.76	178	2.94	0.71	2	2.49	0.17
Active Parental Involvement	33	3.39	0.66	36	3.22	0.59	108	3.31	0.59	177	3.31	0.60	2	0.70	0.09
Programs of Study	34	3.21	0.59	37	3.38	0.59	110	3.26	0.55	181	3.28	0.57	2	0.89	0.01
Self-advocacy/self-determination Skills	34	3.38	0.49	36	3.47	0.56	109	3.48	0.52	179	3.46	0.52	2	0.44	0.07
Self-care/Independent Living Skills	34	3.32	0.59	35	3.54	0.56	106	3.39	0.64	175	3.41	0.62	2	1.22	0.12
Social Skills	33	3.55	0.56	36	3.61	0.49	107	3.46	0.59	176	3.51	0.57	2	1.09	0.11
Strong Student Support	34	3.35	0.65	36	3.50	0.51	110	3.35	0.60	180	3.38	0.59	2	0.86	0.10
Vocational Education	33	3.09	0.68	37	3.19	0.62	110	3.05	0.69	180	3.09	0.67	2	0.56	0.08
Strong Transition Program	33	3.33	0.69	37	3.46	0.65	108	3.10	0.66	178	3.22	0.67	2	4.64*	0.23
Work Study Programs	34	3.12	0.69	37	3.05	0.71	111	2.81	0.64	182	2.92	0.67	2	3.78*	0.20
Exit Exam/High School Diploma	34	3.41	0.61	34	3.59	0.56	109	3.39	0.69	177	3.43	0.65	2	1.27	0.12

Note. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

The predictor variable related to inclusion practice was found to have unequal variance when the Levene's test was conducted. Due to unequal variance, the Welch-F statistic was used to report data in Table 5 concerning respondents' perception of their knowledge of inclusion practices. Respondent group means were within a small range when the Welch test was conducted (3.60-3.76). Study respondents all agreed ( $M = 3.60-3.76$ ) that they had comprehensive knowledge of inclusive practices. There was no significant difference reported (Welch  $F = 1.87$ ,  $df1 = 2$ ,  $df2 = 79.28$ ,  $p > .05$ ).

Table 5

*Perceptions of Knowledge of Evidenced-Based Predictors Based on Position (Welch Statistic)*

	<u>Special Education Directors</u>			<u>Special Education Assistant Directors/ Program Coordinators</u>			<u>Special Education Secondary Teachers</u>			<u>Total</u>						
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>df</i>	<i>df2</i>	<i>Welch</i>	<i>Cohen's f</i>
<i>I have comprehensive knowledge of...</i>																
Inclusion Practices	34	3.76	0.43	37	3.73	0.45	110	3.60	0.59	181	3.66	0.54	2	79.28	1.87	.10

Note. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

**Summary.** Results of these analyses suggested there were little differences in perceptions of knowledge in the 16 evidenced-based predictors among the three groups. Although ANOVAs found differences in the three groups the post-hoc tests analyses were marginal. This suggests small (although statistically significant) differences among special education directors, special education assistant directors/program coordinators, and secondary special education teachers on the knowledge of the 16 evidenced-based predictors. In general terms, all three groups tended to agree with all 16 predictor variables explored in the study.

## **Research Question 2**

What evidenced-based transition predictors are currently utilized in high school settings in the state of Indiana for secondary transition of special education students as perceived by special education directors, assistant directors and/or program coordinators, and secondary special education teachers?

Table 6 shows results of the respondents' utilization of each indicator as part of their secondary programming. The skip logic pattern (Qualtrics) was used. If a respondent answered "yes" as an example to Question 12 then he/she was directed to answer 12a and 12b. If they did not utilize the indicator they answered "No" or if the respondent indicated "Do Not Know" to Question 12 and then the respondent went on to the next question (Question 13) in the study.

Of the predictors, 85.6% of the respondents indicated they were using *career awareness* in secondary transition. There was consistency among all respondent groups (+/- 1.2% [*note.* indicates the range between the highest and lowest %]). Respondents (6.1%) answered "No" and 8.3% indicated they "Do Not Know" concerning the use of career awareness in their secondary transition programs. The findings indicate that the majority of respondents from all groups were implementing career awareness as part of their secondary program related

to transition for SWD. Career awareness was the fifth (5<sup>th</sup>) most utilized of the 16 evidence-based secondary transition predictors in this study.

Respondents (77.3%) indicated they were using *community awareness* in secondary transition. Of the 77.3% who responded “Yes,” there was reasonable consistency among all respondent groups (+/- 10%). There were 11.9% of respondents who indicated “No” and another 10.8% who indicated “Do Not Know” if community awareness was used in their transition programming. The majority of respondents from all groups indicated in this study’s findings were implementing community awareness as part of their secondary program related to transition for students with disabilities (SWD). Community awareness was the twelfth (12<sup>th</sup>) most utilized of the 16 evidence-based secondary transition predictors in this study.

With regards to *inclusion practices* in secondary transition, 88.7% of respondents indicated “Yes,” they were utilizing inclusionary practices in their high school setting. A reasonable level of consistency was demonstrated among all three groups (+/- 12.9%). The response “No” was indicated by 7.3% of respondent groups while “Do Not Know” was indicated by 4.0% survey respondent groups. The findings indicate that the majority of respondents from all groups believed they were implementing inclusion practices as part of their secondary program related to transition for SWD. Inclusion practices were the second (2<sup>nd</sup>) most utilized of the 16 evidence-based secondary transition predictors in this study.

Seventy-eight percent (78.5%) of respondent groups indicated they were implementing *inter-agency collaboration* as part of their secondary transition program. There was a reasonable level of consistency among all respondent groups (+/- 9.8%). There were 9.6% of the respondents who responded “No” and another 11.9% responded “Do Not Know” concerning usage of inter-agency collaboration. The majority of respondents from all groups indicated they

were implementing inter-agency collaboration as part of their secondary program related to transition for SWD. Inter-agency collaboration was the tenth (10<sup>th</sup>) most utilized of the 16 evidence-based secondary transition predictors in this study.

Of the predictors, 80.2% of the respondents indicated they were using *occupational courses* in secondary transition. There was a level of reasonable consistency among all three groups (+/- 14%). Approximately 9% of the respondents (8.5%) answered “No,” and 11.3% answered “Do Not Know” concerning the use of inter-agency collaboration in their secondary transition programs. The findings indicate that the majority of respondents from all groups indicated that they were implementing occupational courses as part of their secondary program related to transition for SWD. Occupational courses were the eighth (8<sup>th</sup>) most utilized of the 16 evidence-based secondary transition predictors in this study.

Approximately 65% of the respondents (64.4%) indicated that their corporation/cooperative utilized *paid employment/work experiences* in secondary transition. There was a level of reasonable consistency among all three groups (+/- 13.5%). There were 22.0% of respondents who answered “No,” and another 13.6% who answered “Do Not Know” if paid employment/work experiences was used in their transition programming. Although the findings indicate the majority of the respondents from all groups indicated that they were implementing paid employment/work experiences, this indicator had the lowest percentage (16<sup>th</sup>) of all the 16 evidenced-based transition predictors.

Over three-quarters of the respondents (77.8%) indicated “Yes” to utilization of *active parental involvement*. There was consistency among all respondent groups (+/- 0.3%). There were 15.3% who answered “No,” and another 6.8% answered “Do Not Know” concerning the use of active parental involvement. The findings indicate that the majority of respondents from



all groups indicated that they were encouraging active parental involvement as part of their secondary program related to transition for SWD. Active parental involvement was the eleventh (11<sup>th</sup>) most utilized of the 16 evidence-based secondary transition predictors in this study.

With regards to *programs of study related to an academic content area*, 71.4% of respondents answered “Yes,” they were utilizing programs of study practices in their high school setting. There was a level of reasonable consistency among the three groups (+/- 17.2%). Approximately 13% of the respondents (13.1%) answered “No,” and another 15.4% responded “Do Not Know” to the utilization of programs of study related to an academic content area. The majority of respondents from all groups were implementing programs of study as part of their secondary program related to transition for SWD. Programs of study were the fifteenth (15<sup>th</sup>) most utilized of the 16 evidence-based secondary transition predictors in this study.

A total of 84.2% of the respondents indicated they were utilizing *self-advocacy/self-determination skills* in their secondary transition programs. There was reasonable consistency among all respondent groups (+/- 10%). There were 9.4% who answered with “No,” and another 5.8% responded “Do Not Know” to the usage of self-advocacy/self-determination skills in their secondary transition programming. The findings indicate that the majority of respondents from all groups indicated that they were implementing self-advocacy/self-determination as part of their secondary program related to transition for SWD. Self-advocacy/self-determination was the seventh (7<sup>th</sup>) most utilized of the 16 evidence-based secondary transition predictors in this study.

Of all respondents, 87.4% indicated they were using *self-care/independent living skills* in secondary transition. There was a level of consistency among the three groups (+/- 14.6%). There were 8.0% of the respondents who reported “No,” and another 4.6% stated they “Do Not Know” regarding to the usage of self-care/independent living skills in their secondary school

setting. The majority of respondents from all groups indicated in this study's findings were implementing self-care/independent living skills as part of their secondary program related to transition for SWD. Self-care/independent living was the fourth (4<sup>th</sup>) most utilized of the 16 evidence-based secondary transition predictors in this study.

Of the respondents, 76.2% indicated they were using *social skills*. There was reasonable consistency among all respondent groups (+/- 11.3). Approximately 15% for the respondents (14.5%) answered "No" with 14.5% and 9.3% answered with "Do Not Know" to the usage of social skills in their secondary school setting. The findings indicated that the majority of respondents from all groups perceived that they were implementing social skills as part of their secondary program related to transition for SWD. Social skills were the thirteenth (13<sup>th</sup>) most utilized of the 16 evidence-based secondary transition predictors in this study.

Of the predictors, 84.7% respondents indicated they were using *strong student support* in secondary transition. There was consistency among all respondent groups (+/- 2.7%). There were 6.5% who responded with "No" and another 8.8% with "Do Not Know" concerning the use of strong student support in their secondary transition programs. The majority of respondents from all groups indicated in this study's findings were implementing strong student support as part of their secondary program related to transition for SWD. Strong student support was the sixth (6<sup>th</sup>) most utilized of the 16 evidence-based secondary transition predictors in this study.

A total of 95.9% of the respondents indicated they were utilizing *vocational education*. There was consistency among all respondent groups (+/- 2.5%). There were 2.4% of the respondents that responded with "No," and another 1.8% with "Do Not Know" if vocational education practices were being utilized in their high school setting. Vocational education was the highest predictor being utilized as indicated. The majority of respondents from all groups

indicated that they were implementing vocational education as part of their secondary program related to transition for students with disabilities (SWD). Vocational education was the number one most utilized of the 16 evidence-based secondary transition predictors in this study.

Using elements of a *strong transition program* in secondary transition had 79% of respondents indicated “Yes” among the groups. There was a level of reasonable consistency among all respondent groups (+/- 14.4%). There were 11.8% respondents who responded with “No,” and another 8.9% reported they “Do Not Know” regarding the utilization of strong transition practices in their secondary transition programs. The majority of respondents from all groups indicated in this study’s findings were implementing strong transition programs as part of their secondary program related to transition for SWD. Strong transition programs were the ninth (9<sup>th</sup>) most utilized of the 16 evidenced-based secondary transition predictors in this study.

With regards to *work study programs*, 71.9% of respondents indicated “Yes” they were utilizing work study programs in their high school setting. There was reasonable consistency among all respondent groups (+/- 6.6%). There were 14.0% of the respondents who answered “No,” and another with 14.0% “Do Not Know” concerning the use of work study programs in their secondary transition programs. The findings indicate that the majority of respondents from all groups indicated that they were implementing work-study programs as part of their secondary program related to transition for SWD. Work-study programs were the fourteenth (14<sup>th</sup>) most utilized of the 16 evidence-based secondary transition predictors in this study.

A total of 88.2% of the respondents indicated “Yes” they were using *exit exam/high school diploma*. There was consistency among all respondent groups (+/- 1.5%). There were 7.7% who responded with “No,” and another 4.1% “Do Not Know” concerning usage of exit exams/high school diploma. The findings indicate that the majority of respondents from all

groups indicated that they were implementing exit exams/high school diploma as part of their secondary program related to transition for SWD. Exit exams/high school diploma was the third (3<sup>rd</sup>) most utilized of the 16 evidence-based secondary transition predictors in this study.

Table 6

*Responses by Position Concerning Utilization of Evidenced-Based Predictors*

		<u>Special Education Directors</u>		<u>Special Education Assistant Directors/ Program Coordinators</u>		<u>Special Education Secondary Teachers</u>		<u>Total</u>	
		<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>N</i>	%
<i>My corporation/cooperative utilizes...</i>									
Career Awareness	Yes	29	85.3	32	86.5	94	85.5	155	85.6
	No	2	5.9	2	5.4	7	6.4	11	6.1
	Do Not Know	3	8.8	3	8.1	9	8.2	15	8.3
	Total	34	18.8	37	20.4	110	60.8	181	100.0
Community Awareness	Yes	28	84.8	28	77.8	80	74.8	136	77.3
	No	3	9.1	4	11.1	14	13.1	21	11.9
	Do Not Know	2	6.1	4	11.1	13	12.1	19	10.8
	Total	33	18.8	36	20.5	107	60.8	176	100.0
Inclusion Practices	Yes	26	78.8	31	88.6	100	91.7	157	88.7
	No	4	12.1	3	8.6	6	5.5	13	7.3
	Do Not Know	3	9.1	1	2.9	3	2.8	7	4.0
	Total	33	18.6	35	19.8	109	61.6	177	100.0
Inter-agency Collaboration	Yes	28	84.8	30	83.3	81	75.0	139	78.5
	No	4	12.1	3	8.3	10	9.3	17	9.6
	Do Not Know	1	3.0	3	8.3	17	15.7	21	11.9
	Total	33	18.6	36	20.3	108	0.6	177	100.0
Occupational Courses	Yes	29	87.9	26	72.2	87	80.6	142	80.2
	No	2	6.1	5	13.9	8	7.4	15	8.5
	Do Not Know	2	6.1	5	13.9	13	12.0	20	11.3
	Total	33	19.0	36	20.3	108	61.0	177	100.0
Paid Employment/Work Experiences	Yes	24	75.0	23	63.9	67	61.5	114	64.4
	No	8	25.0	9	25.0	22	20.2	39	22.0
	Do Not Know	0	0.0	4	11.1	20	18.3	24	13.6
	Total	32	18.0	36	20.3	109	62.0	177	100.0

Table 6 *continued**Responses by Position Concerning Utilization of Evidenced-Based Predictors*

		<u>Special Education Directors</u>		<u>Special Education Assistant Directors/ Program Coordinators</u>		<u>Special Education Secondary Teachers</u>		<u>Total</u>	
		<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>N</i>	%
Active Parental Involvement	Yes	25	78.1	28	77.8	84	77.8	137	77.8
	No	6	18.8	4	11.1	17	15.7	27	15.3
	Do Not Know	1	3.1	4	2.3	7	6.5	12	6.8
	Total	32	18.1	36	20.4	108	61.3	176	100.0
Programs of Study	Yes	19	59.4	24	66.7	82	76.6	125	71.4
	No	7	21.9	8	22.2	8	7.5	23	13.1
	Do Not Know	6	18.8	4	11.1	17	15.9	27	15.4
	Total	32	18.2	36	21.0	107	61.1	175	100.0
Self-advocacy/Self- determination Skills	Yes	26	83.9	33	91.7	85	81.7	144	84.2
	No	2	6.5	2	5.6	12	11.5	16	9.40
	Do Not Know	2	6.5	1	2.8	7	6.7	10	5.80
	Total	31	18.1	36	21.0	104	61.0	171	100.0
Self-care/Independent Living Skills	Yes	30	96.8	34	94.4	88	82.2	152	87.4
	No	0	0.0	1	2.8	13	12.1	14	8.0
	Do Not Know	1	3.2	1	2.8	6	5.6	8	4.6
	Total	31	18.0	36	21.0	107	61.4	174	100.0
Social skills	Yes	26	83.9	28	80.0	77	72.6	131	76.2
	No	3	9.7	5	14.3	17	16.0	25	14.5
	Do Not Know	2	6.5	2	5.7	12	11.3	16	9.3
	Total	31	18.0	35	20.3	106	62.0	172	100.0
Strong Student Support	Yes	26	83.9	29	82.9	89	85.6	144	84.7
	No	3	9.7	2	5.7	6	5.8	11	6.5
	Do Not Know	2	6.5	4	11.4	9	8.7	15	8.8
	Total	31	18.2	35	21.0	104	61.1	170	100.0
Vocational Education	Yes	30	96.8	33	94.3	99	96.1	162	95.9
	No	0	0.0	0	0.0	4	3.9	4	2.4
	Do Not Know	1	3.2	2	5.7	0	0.0	3	1.8
	Total	31	18.3	35	21.0	103	61.0	169	100.0
Strong Transition Program	Yes	23	74.2	31	88.6	80	77.7	134	79.3
	No	6	19.4	3	8.6	11	10.7	20	11.8
	Do Not Know	2	6.5	1	2.9	12	11.7	15	8.9
	Total	31	18.3	35	21.0	103	61.0	169	100.0

Table 6 *continued**Responses by Position Concerning Utilization of Evidenced-Based Predictors*

		<u>Special Education Directors</u>		<u>Special Education Assistant Directors/ Program Coordinators</u>		<u>Special Education Secondary Teachers</u>		<u>Total</u>	
		<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>N</i>	%
Work Study Programs	Yes	22	71.0	27	77.1	74	70.5	123	71.9
	No	5	16.1	4	11.4	15	14.3	24	14.0
	Do Not Know	4	12.9	4	11.4	16	15.2	24	14.0
	Total	31	18.1	35	20.4	105	61.4	171	100.0
Exit Exam/High School Diploma	Yes	27	87.1	31	88.6	91	88.3	149	88.2
	No	4	12.9	4	11.4	5	4.90	13	7.7
	Do Not Know	0	0.0	0	0.0	7	6.80	7	4.1
	Total	31	18.3	35	21.0	103	61.0	169	100.0

*Note.* Percentages represent data reported by category.

**Summary.** In general terms, all three groups tended to indicate with the utilization of the 16 evidenced-based transition predictors in their secondary settings for students with disabilities with the exception of paid employment/work experiences. All predictors had perceived utilization percentages of approximately 65% or higher, and eight predictors had utilization ratings of 80% or more. Vocational education was the predictor most utilized among respondents in all positions; the lowest utilization of a predictor was paid employment/work experiences.

### Research Question 3

What level of effectiveness are the 16 evidenced-based transition predictors being implemented as perceived by special education directors, assistant directors and/or program coordinators, and secondary special education teachers?

The “Do Not Know” responses regarding the effectiveness of the evidenced-based predictors are indicated in Table 7. Although the respondents answered “Yes” to the usage of

these predictors, some respondents did not know the effectiveness of the predictor in practice in their secondary school settings. The “Do Not Know” responses were eliminated for statistical analysis. Subsequent data reporting then utilized the 4-point Likert-scale.

Directors answered “Do Not Know” concerning effectiveness of career awareness ( $N = 3$ ; 10.3%), community awareness ( $N = 1$ ; 3.7%), inter-agency collaboration ( $N = 2$ ; 7.1%), occupational courses ( $N = 2$ ; 7.1%), active parental involvement ( $N = 2$ ; 8.0%), programs of study ( $N = 1$ ; 5.3), and self-advocacy/self-determination ( $N = 1$ ; 4.0%). Special education assistant directors/program coordinators responded “Do Not Know” to career awareness ( $N = 2$ ; 6.5%), paid employment/work experiences ( $N = 2$ ; 8.7%), strong student support ( $N = 1$ ; 3.1%), and vocational education ( $N = 1$ ; 3.1%). Secondary special education teachers responded “Do Not Know” concerning effectiveness of career awareness ( $N = 8$ ; 8.6%), community awareness ( $N = 3$ ; 3.8%), inter-agency collaboration ( $N = 1$ ; 1.2%), occupational courses ( $N = 2$ ; 2.3%), paid employment/work experiences ( $N = 1$ ; 1.5%), active parental involvement ( $N = 2$ ; 2.4%), self-advocacy/self-determination ( $N = 1$ ; 1.2%), self-care/independent living ( $N = 4$ ; 4.7 %), social skills ( $N = 1$ ; 1.3%), strong student support ( $N = 2$ ; 2.3%), elements of a strong transition program ( $N = 1$ ; 1.3%), vocational education ( $N = 1$ ; 1.0%), work study programs ( $N = 3$ ; 4.1%), and exit exams/high school diploma ( $N = 1$ ; 1.1%).

Table 7

*Respondents' "Do Not Know" Responses to Effectiveness of Evidenced-Based Predictors Based on Position*

		Special Education Directors		Special Education Assistant Directors/ Program Coordinators		Special Education Secondary Teachers		Total	
		<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>N</i>	%
<i>Describe the effectiveness</i>									
Career Awareness	Do Not Know	3	10.3	2	6.5	8	8.6	13	8.5
Community Awareness	Do Not Know	1	3.7	0	0.0	3	3.8	4	3.0
Inclusion Practices	Do Not Know	0	0.0	0	0.0	0	0.0	0	0.0
Inter-agency Collaboration	Do Not Know	2	7.1	0	0.0	1	1.2	3	2.2
Occupational Courses	Do Not Know	2	7.1	0	0.0	2	2.3	3	2.8
Paid Employment/Work Experiences	Do Not Know	0	0.0	2	8.7	1	1.5	3	2.6
Active Parental Involvement	Do Not Know	2	8.0	0	0.0	2	2.4	4	2.9
Programs of Study	Do Not Know	1	5.3	0	0.0	0	0.0	1	0.8
Self-advocacy/Self-determination Skills	Do Not Know	1	4.0	0	0.0	1	1.2	2	1.4
Self-care/Independent Living	Do Not Know	0	0.0	0	0.0	4	4.7	4	2.7
Social Skills	Do Not Know	0	0.0	0	0.0	1	1.3	1	0.8
Strong Student Support	Do Not Know	0	0.0	0	0.0	2	2.3	2	1.4
Strong Transition Program	Do Not Know	0	0.0	0	0.0	1	1.3	1	0.7
Vocational Education	Do Not Know	0	0.0	1	3.1	1	1.0	2	1.3
Work Study Programs	Do Not Know	0	0.0	0	0.0	3	4.1	3	2.5
Exit Exam/High School Diploma	Do Not Know	0	0.0	0	0.0	1	1.1	1	0.7

*Note.* Percentages represent data reported by category and total for "Do Not Know" responses.

Table 8 shows the perceptions of effectiveness of the 16 evidenced-based predictors based on position and exploration of group differences. The Kruskal-Wallis (KW) was utilized here due to the limited number of responses ( $n < 30$ ) as noted in the directors and assistant



directors/program coordinators respondent groups. The Kruskal-Wallis tests were used as the more appropriate statistic for analysis of these data.

The perceptions of effectiveness of the 16 evidenced-based predictors based on each of the predictor variable are reported in Table 8. Respondents agreed ( $M = 3.08-3.31$ ) that career awareness education was effectively implemented for SWD in their corporations/cooperatives. There was no significant difference reported ( $\chi^2 = 2.83, df = 2, p > .05$ ). In the area of community awareness respondents' agreed ( $M = 3.08-3.21$ ) that opportunities were implemented effectively in secondary transition programs for SWD in their setting. No significant difference was reported ( $\chi^2 = 0.72, df = 2, p > .05$ ). Furthermore, respondents' agreed ( $M = 3.42-3.55$ ) that their corporation/cooperative was effectively providing inclusion in general education for SWD at the secondary level. There was no significant difference reported ( $\chi^2 = .74, df = 2, p > .05$ ). Respondents' tended to agree or agreed ( $M = 2.85-3.07$ ) that inter-agency collaboration was effectively implemented to SWD in secondary transition programs in their setting. There was no significant difference reported ( $\chi^2 = 3.34, df = 2, p > .05$ ). The predictor concerning occupational courses had agreement from respondents ( $M = 3.04-3.25$ ) that these were implemented effectively for SWD. No significant difference was reported ( $\chi^2 = 2.57, df = 2, p > .05$ ). Respondents indicated that paid employment/work experience was effectively implemented in secondary transition programs offered to SWD with overall agreement ( $M = 3.00-3.14$ ). There was no significant difference reported ( $\chi^2 = 0.63, df = 2, p > .05$ ). The predictor regarding high levels of parental involvement had agreement ( $M = 3.41-3.65$ ). No significant difference reported ( $\chi^2 = 3.49, df = 2, p > .05$ ). There was agreement ( $M = 3.11-3.26$ ) among respondents that structured programs of study related to an academic or vocational field was effectively implemented for SWD in transition programming in their setting. There was no significant

difference reported ( $\chi^2 = 0.85, df = 2, p > .05$ ). The predictor of self-advocacy/self-determination instruction and effective implementation for SWD in transition programs had overall agreement ( $M = 3.04-3.33$ ) among respondents. Furthermore, there was no significant difference reported ( $\chi^2 = 4.17, df = 2, p > .05$ ). Respondents agreed ( $M = 3.34-3.40$ ) that self-care/independent living instruction was implemented effectively for SWD in secondary transition programs offered.

There was no significant difference reported ( $\chi^2 = 0.40, df = 2, p > .05$ ). Respondents also agreed ( $M = 3.12-3.29$ ) that there was effective implementation of strong student supports in secondary transition programs offered to SWD in their setting. There were no significant differences was reported ( $\chi^2 = 2.27, df = 2, p > .05$ ). Respondents' agreed ( $M = 3.15-3.32$ ) that there was effective implementation of strong student supports in secondary transition programs offered to SWD.

There was no significant difference reported ( $\chi^2 = 1.82, df = 2, p > .05$ ). With regards to the effectiveness of strong transition programs offered and implemented at the secondary level for SWD, respondents' agreed ( $M = 3.13-3.30$ ) these were effective in their setting. Moreover, there was no significant difference reported ( $\chi^2 = 1.31, df = 2, p > .05$ ). There was agreement was found ( $M = 3.19-3.94$ ) among respondents with regard to vocational education being effectively implemented for SWD in their school/cooperative settings. There was no significant difference reported ( $\chi^2 = 1.74, df = 2, p > .05$ ). Respondents' agreed ( $M = 3.11-3.27$ ) that work-study programs were effectively implemented in their school setting for SWD. There was no significant difference reported ( $\chi^2 = 1.05, df = 2, p > .05$ ). In addition, respondents agreed ( $M = 3.26-3.42$ ) that exit exam/high school diploma requirements were effectively implemented in secondary transition programs offered to SWD. There was no significant difference reported ( $\chi^2 = 1.45, df = 2, p > .05$ ).

Table 8

*Perceptions of Effectiveness of Evidenced-Based Predictors Based on Position*

	<u>Special Education Directors</u>			<u>Special Education Assistant Directors/ Program Coordinators</u>			<u>Special Education Special Secondary Teachers</u>			<u>Total</u>					
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>df</i>	$\chi^2$	W
<i>Perceptions of the effectiveness in providing...</i>															
Career Awareness	26	3.08	0.56	29	3.31	0.54	85	3.28	0.63	140	3.25	0.60	2	2.83	0.14
Community Awareness	26	3.08	0.63	28	3.21	0.57	76	3.17	0.58	130	3.16	0.58	2	0.72	0.07
Inclusion for SWD	26	3.42	0.58	31	3.55	0.51	100	3.43	0.62	157	3.45	0.59	2	0.74	0.07
Inter-agency Collaboration	26	2.85	0.54	30	3.07	0.64	80	3.05	0.55	136	3.01	0.57	2	3.34	0.16
Occupational Courses	26	3.04	0.6	26	3.15	0.61	85	3.25	0.53	137	3.19	0.56	2	2.57	0.14
Paid Employment/Work Experiences	24	3.00	0.51	21	3.14	0.66	66	3.02	0.77	111	3.04	0.70	2	0.63	0.07
Active Parental Involvement	23	3.65	0.57	28	3.54	0.58	82	3.41	0.61	133	3.48	0.60	2	3.49	0.16
Programs of Study	18	3.11	0.58	23	3.26	0.69	79	3.23	0.55	20	3.22	0.58	2	0.85	0.08
Self-advocacy/Self- determination Skills	24	3.04	0.62	33	3.18	0.73	84	3.33	0.59	141	3.25	0.63	2	4.17	0.17
Self-care/Independent Living Skills	30	3.40	0.62	33	3.39	0.56	82	3.34	0.57	145	3.37	0.58	2	0.40	0.05
Social Skills	26	3.12	0.43	28	3.18	0.77	75	3.29	0.59	129	3.23	0.61	2	2.27	0.13
Strong Student Support	26	3.15	0.54	28	3.32	0.55	86	3.31	0.52	140	3.29	0.53	2	1.82	0.11

Table 8 *continued**Perceptions of Effectiveness of Evidenced-Based Predictors Based on Position*

	<u>Special Education Directors</u>			<u>Special Education Assistant Directors/ Program Coordinators</u>			<u>Special Education Special Secondary Teachers</u>			<u>Total</u>					
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>df</i>	$\chi^2$	W
<i>Perceptions of the effectiveness in providing...</i>															
Strong Transition Program	23	3.30	0.56	31	3.13	0.56	79	3.25	0.54	133	3.23	0.55	2	1.31	0.10
Vocational Education	29	3.28	0.7	31	3.19	.54	96	3.34	0.61	156	3.3	0.62	2	1.74	0.10
Work Study Programs	22	3.27	0.63	27	3.11	0.58	70	3.16	0.61	119	3.17	0.60	2	1.05	0.09
Exit Exam/High School Diploma	27	3.26	0.53	31	3.42	0.62	89	3.33	0.62	147	3.33	0.60	2	1.45	0.10

*Note.* \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

**Summary.** Results of these analyses suggest there is little difference among respondent groups and major agreement regarding their perceptions of the effectiveness concerning the 16 evidenced-based predictors offered to SWD in secondary transition programs and in their settings. In general terms, all three groups agreed with the effectiveness of the evidence-based predictors. There was one exception, career awareness.

#### **Research Question 4**

What evidenced-based transition predictors are impacting post-school outcomes in high school settings in the state of Indiana for secondary transition of special education students as perceived by special education directors, assistant directors and/or program coordinators, and secondary special education teachers?

Table 9 indicates the “Do Not Know” responses to the impact of the 16 evidenced-based transition predictors by position. Respondents were given the option to indicate “Do Not Know” if they did not know the impact of a predictor variable on post-school outcomes for SWD. Directors answered “Do Not Know” to career awareness ( $N = 3$ , 10.3%), community awareness ( $N = 3$ , 11.1%), inter-agency collaboration ( $N = 4$ , 14.3%), occupational courses ( $N = 1$ , 3.7%), active parental involvement ( $N = 4$ , 16.0%), programs of study ( $N = 1$ , 5.6%), self-advocacy/self-determination ( $N = 4$ , 15.4%), self-care/independent living ( $N = 3$ , 10.0%), social skills ( $N = 4$ , 15.4%), strong student support ( $N = 2$ , 7.7%), elements of strong transition program ( $N = 1$ , 4.3%), vocational program ( $N = 1$ , 3.3%), work study ( $N = 1$ , 4.5%), and exit exam/high school diploma ( $N = 2$ , 7.4%). Special education assistant directors/program coordinators responded “Do Not Know” to (a) career awareness ( $N = 1$ , 3.2%), (b) community awareness ( $N = 1$ , 3.6%), (c) inter-agency collaboration ( $N = 1$ , 3.3%), (d) paid employment/work experiences ( $N = 2$ , 8.7%), (e) self-advocacy/self-determination ( $N = 1$ , 3.0%), (f) self-care/independent living ( $N = 1$ ,

3.0%), (g) social skills ( $N = 1$ , 3.6%), (h) strong student support ( $N = 1$ , 3.6%), (i) elements of a strong transition program ( $N = 1$ , 3.2%), and (j) vocational education ( $N = 2$ , 6.1%). However, secondary special education teachers responded “Do Not Know” to (a) career awareness ( $N = 10$ , 10.8%), (b) community awareness ( $N = 7$ , 9.0%), (c) inclusion practices ( $N = 13$ , 13.0%), (d) inter-agency collaboration ( $N = 8$ , 9.9%), (e) occupational courses ( $N = 5$ , 5.7%), (f) paid employment/work experiences ( $N = 3$ , 4.5%), (g) active parental involvement ( $N = 3$ , 3.6%), (h) self-advocacy/self-determination ( $N = 7$ , 8.3%), (i) self-care/independent living ( $N = 4$ , 4.6 %), (j) social skills ( $N = 5$ , 6.5%), (k) strong student support ( $N = 3$ , 3.4%), (l) elements of a strong transition program ( $N = 3$ , 3.8%), (m) vocational education ( $N = 7$ , 7.3%), (n) work study programs ( $N = 7$ , 9.6%), and (o) exit exams/high school diploma ( $N = 3$ , 3.3%).

It should be noted that although respondents answered “Yes” to the usage of these 16 evidenced-based transition predictors, in some cases they did not know the impact of the specific predictors on post-school outcomes for SWD in their secondary school settings. As stated earlier, the “Do Not Know” responses were eliminated for statistical analysis. Subsequent data are reported using the 4-point Likert-scale (strongly disagree-strongly agree).

Table 9

*Respondents’ “Do Not Know” Responses to Impact of Evidenced-Based Predictors Based on Position*

	Special Education Directors		Special Education Assistant Directors/ Program Coordinators		Special Education Secondary Teachers		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>N</i>	%
<i>Describe the impact...</i>								
Career Awareness	3	10.3	1	3.2	10	10.8	14	9.2
Community Awareness	3	11.1	1	3.6	7	9.0	11	8.3
Inclusion Practices	0	0.0	0	0.0	13	13.0	13	8.3

Table 9 *continued**Respondents' "Do Not Know" Responses to Impact of Evidenced-Based Predictors Based on Position*

	Special Education Directors		Special Education Assistant Directors/ Program Coordinators		Special Education Secondary Teachers		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>N</i>	%
<i>Describe the impact...</i>								
Inter-agency Collaboration	4	14.3	1	3.3	8	9.9	13	9.4
Occupational Courses	1	3.7	0	0.0	5	5.7	6	4.3
Paid Employment/Work Experiences	1	4.2	2	8.7	3	4.5	6	5.3
Active Parental Involvement	4	16.0	0	0.0	3	3.6	7	5.1
Programs of Study	1	5.6	0	0.0	3	3.8	4	3.3
Self-advocacy/Self- determination	4	15.4	1	3.0	7	8.3	2	8.4
Self-care/Independent Living	3	10.0	1	3.0	4	4.6	8	5.3
Social Skills	4	15.4	1	3.6	5	6.5	10	7.6
Strong Student Support	2	7.7	1	3.6	3	3.4	6	4.3
Strong Transition Program	1	4.3	1	3.2	3	3.8	5	3.8
Vocational Education	1	3.3	2	6.1	7	7.3	10	6.3
Work Study Programs	1	4.5	0	0.0	7	9.6	8	6.3
Exit Exam/High School Diploma	2	7.4	0	0.0	3	3.3	5	3.4

*Note.* Percentages represent data reported by category and total for "Do Not Know" responses.

Table 10 presents respondents' perceptions of the impact of the 16 evidenced-based transition predictors based on position and exploration of group differences. Respondents agreed ( $M = 3.12-3.20$ ) that career awareness education implemented in secondary transition programming had a positive impact on post-school outcomes for SWD in their school/cooperative. There was no significant difference reported ( $\chi^2 = 0.44$ ,  $df = 2$ ,  $p > .05$ ). In the area of community awareness, respondents agreed ( $M = 3.08-3.41$ ) that community awareness

education had a positive impact on post-school outcomes for SWD in their setting. There was no significant difference reported ( $\chi^2 = 5.11, df = 2, p > .05$ ). Respondents agreed ( $M = 3.38-3.45$ ) that inclusion in general education for SWD in secondary transition programs had a positive impact on post-school outcomes for SWD in their school/cooperative. Furthermore, there was no significant difference reported ( $\chi^2 = 0.21, df = 2, p > .05$ ). There was agreement indicated among respondents ( $M = 3.08-3.24$ ) that inter-agency collaboration had a positive impact on post-school outcomes for SWD in their setting. There was no significant difference reported ( $\chi^2 = 0.87, df = 2, p > .05$ ). Likewise, respondents agreed ( $M = 3.19-3.32$ ) that the impact of occupational courses in secondary transition programming had a positive impact on post-school outcomes for SWD. No significant difference was reported ( $\chi^2 = 1.20, df = 2, p > .05$ ). There was agreement ( $M = 3.00-3.31$ ) indicated among respondents on the impact of paid employment/work experience and the positive impact on post-school outcomes for SWD in their school/cooperative. In addition, there was no significant difference reported ( $\chi^2 = 5.66, df = 2, p > .05$ ). Respondents agreed ( $M = 3.41-3.62$ ) that active parental involvement in secondary transition programming had a positive impact on post-school outcomes for SWD in their school/cooperative. No significant difference was reported ( $\chi^2 = 1.88, df = 2, p > .05$ ). Respondents further agreed ( $M = 3.24-3.33$ ) that structured programs of study related to an academic or vocational field in secondary transition programming had a positive impact on post-school outcomes for SWD. No significant difference reported ( $\chi^2 = 0.28, df = 2, p > .05$ ). The predictor self-advocacy/self-determination skills indicated agreement ( $M = 3.34-3.48$ ) among all groups that implemented in secondary transition programming offered to SWD had a positive impact on post-school outcomes for SWD in their school/cooperative. Moreover, no significant difference reported ( $\chi^2 = 0.22, df = 2, p > .05$ ). Respondents also agreed ( $M = 3.58-3.77$ ) that self-care/independent living skills implemented in



secondary transition programming had a positive impact on post-school outcomes for SWD.

There was no significant difference reported ( $\chi^2 = 1.16$ ,  $df = 2$ ,  $p > .05$ ). Furthermore, respondents agreed ( $M = 3.33$ - $3.40$ ) that social skills training implemented in secondary transition programs offered to SWD had a positive impact on post-school outcomes for SWD in their setting. There was no significant difference reported ( $\chi^2 = 0.05$ ,  $df = 2$ ,  $p > .05$ ). In the area of strong student support, respondents agreed ( $M = 3.29$ - $3.41$ ) that supports implemented in secondary transition programming had a positive impact on post-school outcomes for SWD. There was no significant difference reported ( $\chi^2 = 0.31$ ,  $df = 2$ ,  $p > .05$ ). There was agreement ( $M = 3.33$ - $3.46$ ) among respondents of a strong transition programs implemented in secondary transition programming had a positive impact on post-school outcomes for SWD in their school/cooperative. In addition, there was no significant difference reported ( $\chi^2 = 0.61$ ,  $df = 2$ ,  $p > .05$ ). Respondents agreed ( $M = 3.39$ - $3.49$ ) that vocational education implemented in secondary transition programs in their setting had a positive impact on post-school outcomes for SWD in their school/cooperative. There was no significant difference reported ( $\chi^2 = 0.88$ ,  $df = 2$ ,  $p > .05$ ). Agreement ( $M = 3.30$ - $3.38$ ) was indicated among respondents that a work-study program implemented as part of secondary transition offered to SWD in their setting had a positive impact on post-school outcomes. There were no significant difference reported ( $\chi^2 = 0.58$ ,  $df = 2$ ,  $p > .05$ ). Furthermore, respondents agreed ( $M = 3.23$ - $3.48$ ) that the impact of exit exam/high school diploma requirements implemented in secondary transition programming had a positive impact on post-school outcomes for SWD in their school/cooperative. There was no significant difference reported ( $\chi^2 = 2.74$ ,  $df = 2$ ,  $p > .05$ ).

Table 10

*Perceptions of Impact of Evidenced-Based Predictors Based on Position*

	<u>Special Education Directors</u>			Special Education Assistant Directors/ Program <u>Coordinators</u>			Special Education Special Secondary <u>Teachers</u>			<u>Total</u>					
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>df</i>	$\chi^2$	W
<i>Perceptions of the impact in providing...</i>															
Career Awareness	26	3.12	0.65	30	3.17	0.53	83	3.20	0.6	139	3.18	0.59	2	0.44	0.06
Community Awareness	24	3.08	0.58	27	3.41	0.64	71	3.20	0.5	122	3.22	0.55	2	5.11	0.20
Inclusion Practices	26	3.38	0.57	31	3.45	0.51	87	3.38	0.6	144	3.40	0.57	2	0.21	0.04
Inter-agency Collaboration	24	3.08	0.65	29	3.24	0.64	73	3.14	0.65	126	3.15	0.65	2	0.87	0.08
Occupational Courses	26	3.23	0.51	26	3.19	0.57	82	3.32	0.52	134	3.28	0.53	2	1.20	0.09
Paid Employment/Work Experiences	23	3.00	0.52	21	3.29	0.56	64	3.31	0.62	108	3.24	0.59	2	5.66	0.23
Active Parental Involvement	21	3.62	0.59	28	3.54	0.58	81	3.41	0.67	130	3.48	0.64	2	1.88	0.12
Programs of Study	17	3.24	0.66	24	3.33	0.64	76	3.33	0.53	117	3.32	0.57	2	0.28	0.05
Self-advocacy/self-determination Skills	22	3.45	0.6	32	3.34	0.79	77	3.48	0.53	131	3.44	0.61	2	0.22	0.04
Self-care/Independent Living Skills	30	3.77	0.97	33	3.58	0.71	87	3.60	0.72	150	3.63	0.77	2	1.16	0.09
Social Skills	22	3.36	0.58	27	3.33	0.78	72	3.40	0.52	121	3.38	0.60	2	0.05	0.02
Strong Student Support	24	3.29	0.69	27	3.41	0.57	84	3.38	0.51	135	3.37	0.56	2	0.31	0.05
Strong Transition Program	22	3.45	0.60	30	3.33	0.66	76	3.46	0.50	128	3.43	0.56	2	0.61	0.07
Vocational Education	29	3.41	0.68	31	3.39	0.56	89	3.49	0.55	149	3.46	0.58	2	0.88	0.08

Table 10 *continued**Perceptions of Impact of Evidenced-Based Predictors Based on Position*

	<u>Special Education Directors</u>			Special Education Assistant Directors/ Program <u>Coordinators</u>			Special Education Special Secondary <u>Teachers</u>			<u>Total</u>					
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>df</i>	$\chi^2$	<i>W</i>
<i>Perceptions of the impact in providing...</i>															
Work Study Programs	21	3.38	0.67	27	3.30	0.61	66	3.30	0.53	114	3.32	0.57	2	0.58	0.07
Exit Exam/High School Diploma	25	3.32	0.69	31	3.48	0.51	88	3.23	0.71	144	3.30	0.67	2	2.74	0.14

Note. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

**Summary.** The results suggest there is little difference in perceptions of the impact of the 16 evidenced-based predictors among the three positions. In general terms, persons in all three positions tend to agree the 16 evidenced-based transition predictors have a positive impact on transition outcomes for students with disabilities. There was one exception, career awareness. This will be addressed in further detail in Chapter 5.

### **Question 5**

Are there differences in perception concerning the knowledge, use, and effectiveness of the transition predictors among special education directors, assistant directors and/or program coordinators, and secondary special education teachers?

The mean range for the perceptions of knowledge of career awareness among all three positions was 3.06-3.16, indicating that respondents were in agreement that they had knowledge of career awareness (Table 4). The range for percentage that career awareness was utilized in their secondary setting to support transition planning for SWD was 85.3%-86.5%, indicating a high level of usage among all three groups that career awareness was being used to support secondary transition (Table 6). The mean range for the perception of effectiveness among all three positions was 3.08-3.31, indicating agreement that career awareness was being effectively implemented (Table 8) and 3.12-3.20 concerning the positive impact on transition outcomes for SWD in their school/cooperative setting (Table 10). Overall, all three respondent groups by position agreed they had knowledge of career awareness and the utilization and effectiveness of career awareness for SWD in secondary transition programs and services in their secondary school setting.

The mean range for the perceptions of knowledge of community awareness among all three positions was 3.00-3.22, indicating agreement (Table 4). The range for the percentage that

community awareness was utilized in their secondary setting to support transition for SWD was 74.8%-84.8% (Table 6). This indicated a level of difference in perception on the utilization of community awareness. Secondary special education teachers reported this lowest (74.8%) while special education directors were the highest (84.8%). The perception of mean range for effectiveness among all positions was 3.08-3.21, indicating agreement that community awareness was being effectively implemented (Table 8) and 3.08 – 3.41 concerning the positive impact on transition outcomes for SWD in their school/cooperative setting (Table 10). Overall, the three respondent groups by position agreed they had good knowledge of community awareness and the utilization and effectiveness of community awareness for SWD in secondary transition programs and services in their secondary school setting(s).

The mean range for the perceptions of knowledge of inclusion practices among all three positions mean range was 3.60-3.76. There was statistical difference as reported by the Welch statistic (1.87,  $p > .05$ ) indicating a level of disagreement (Table 5). The range for percentage that inclusion practices were utilized in their secondary setting(s) to support transition planning for SWD was 78.8%-91.7%. This indicated a level of difference in the perception of inclusion practices. Special education directors were the lowest (78.8%) while secondary special education teachers reported this highest (91.7%) (Table 6). The mean range for the perception of effectiveness among all positions was 3.42-3.55, indicating agreement that inclusion practices were being effectively implemented (Table 8) and 3.38-3.45 concerning the positive impact on transition outcomes for SWD in their school/cooperative setting (Table 10). Overall, the three respondent groups by position agreed they had a level of effectiveness and utilization of inclusion practices for SWD in secondary transition programs and services in their secondary school setting(s). The three groups tend to disagree with the perception of knowledge of

inclusion practices for SWD in secondary transition programs and services in the secondary school setting(s).

The mean range for perceptions of knowledge in inter-agency collaboration among all three positions mean range was 2.74-3.14. There was statistical difference as reported by the *F* statistic (5.71,  $p < .05$ ) indicating a level of disagreement (Table 4). The range of percentage that inter-agency collaboration was utilized in their secondary setting(s) to support transition planning for SWD was 75.0-84.8% (Table 6). This indicated a level of difference in perception on the utilization of inter-agency collaboration practices. Secondary special education teachers reported this lowest (75.0%) while special education directors were the highest (84.8%). The perception of effectiveness is displayed in Table 8. The mean range among all positions was 2.85-3.07, indicating respondents agreed inter-agency collaboration was being effectively implementing (Table 8) and 3.08-3.24 concerning the positive impact on transition outcomes for SWD in their school/cooperative setting (Table 10). Overall, the three respondent groups agreed they had good knowledge of inter-agency collaboration even though a significant difference was reported among groups. The respondent groups by groups also agreed with the level of utilization and effectiveness of inter-agency collaboration in transition planning for SWD in their school setting(s).

The mean range was 3.00-3.16 for the perceptions of knowledge of occupational courses among all three positions (Table 4) indicating that respondents agreed that they have knowledge of occupational courses. The range for utilization of occupational courses as reported by percentages was 72.2-87.9% (Table 6). There is a level of difference on the perception of utilization of occupational courses. Assistant directors/program coordinators had the lowest percentage of utilization (72.2%) while special education directors were the highest (78.8%). The

mean range for the perception of effectiveness among all positions was 3.04-3.25 indicating agreement that occupational courses were being effectively implemented (Table 8) and 3.19-3.32 concerning the positive impact on transition outcomes for SWD in their school/cooperative setting (Table 10). Overall, the three respondent groups agreed they had good knowledge of occupational courses and in the utilization and effectiveness in transition for SWD in secondary transition programs and services in their secondary school setting(s).

Reported in Table 4 are the perceptions of knowledge of paid employment/work experiences among all three positions. The mean range was 2.86-3.16 indicating respondents agreed that they had knowledge of paid employment/work experiences (Table 4). The mean range for perceptions of the respondents that paid employment/work experiences were being utilized in their secondary setting(s) to support transition planning was 61.5%-75.0% (Table 6). There is a level of difference in the perception of utilization of paid employment/work experiences. Secondary special education teachers reported this lowest (61.5%) while special education directors were the highest (75.0%). The range for the perception of effectiveness among all positions was 3.00-3.14, indicating agreement that paid employment/work experiences were being effectively implemented (Table 8) and 3.00-3.31 concerning the positive impact on transition outcomes for SWD in their school/cooperative (Table 10). Overall, the three respondent groups by position agreed they had good knowledge of paid employment/work experience and in the utilization and effectiveness of paid employment/work experiences for SWD in secondary transition programs and services in their secondary school setting(s).

Perceptions of knowledge for active parental involvement among all three positions are reported in Table 4. The mean range was 3.22-3.39 indicating that respondents were in agreement that they had comprehensive knowledge of active parental involvement. The range of percentage that

active parental involvement was utilized was 77.8%-78.1% indicating agreement among all three groups that active parental involvement was being utilized to support secondary transition (Table 6). For the mean range for perception of effectiveness among all positions was 3.41-3.65, indicating agreement that active parental involvement were being effective (Table 8) and 3.41-3.62 concerning the positive impact on transition outcomes for SWD in the school/cooperative setting (Table 10). Overall, the three respondent groups by position agreed they had knowledge of active parental involvement and in the utilization and effectiveness of active parental involvement for SWD in secondary transition programs and services in their secondary school setting(s).

The mean range was 3.21-3.38 for the perceptions of knowledge of programs of study related to an academic content area among all three positions (Table 4) indicating that respondents were in agreement they had knowledge of programs of study related to an academic content area to support transition planning for SWD. Reported in Table 6 are the percentages of utilization. The range for utilization was 59.4%-76.6%. There was a level of difference in perception on the utilization of programs of study related to an academic content area being used to support secondary transition. Special education directors were the lowest (59.4%) while secondary special education teachers reported this highest (76.6%). The mean range for perception of effectiveness among all positions was 3.11-3.26, indicating agreement that a structured program of study related to an academic or vocational area was being effectively implemented (Table 8) and 3.24-3.33 concerning the positive impact on transition outcomes for SWD in their school/cooperative setting (Table 10). Overall, the three respondent groups agreed they had good knowledge of programs of study related to an academic content area and in the utilization and effectiveness of programs of study related to a content area to support transition



planning for SWD in secondary transition programs and services in their secondary school setting(s).

The mean range for the perceptions of knowledge of self-advocacy/self-determination among all three positions was 3.38-3.48, indicating that respondents agreed that they had knowledge of self-advocacy/self-determination (Table 4). The range for percentage that self-advocacy/self-determination was utilized in their secondary setting(s) to support transition planning for SWD was 81.7%-91.7% (Table 6). There was a level of difference on the perception of self-advocacy/self-determination to support transition planning for SWD. Secondary special education teachers reported this lowest (81.7%) while assistant special education directors/program coordinators were the highest (91.7%). Reported in Table 8 are the perceptions of effectiveness. The range among all positions was 3.04-3.33 indicating agreement that self-advocacy/self-determination instruction was being effectively implemented (Table 8) and 3.34-3.48 concerning the positive impact on transition outcomes for SWD in their school/cooperative setting (Table 10). Overall, the three respondent groups by position agreed they had good knowledge of self-advocacy/self-determination and in the utilization and effectiveness of self-advocacy/self-determination to support transition for SWD in secondary transition programs and services in their secondary school setting(s).

The mean range for the perceptions of knowledge of self-care/independent living skills was 3.32-3.59 indicating that respondents agreed that they had knowledge of self-care/independent living (Table 4). The range for percentage that self-care/independent living was utilized in their secondary setting(s) to support transition planning for SWD was 82.2%-96.8% (Table 6). There was a level of difference on the perception of self-care/independent living skills. Secondary special education teachers reported this lowest (82.2%) while special education

directors were the highest (96.8%). The mean range for the perception of effectiveness among all positions was 3.34-3.40, indicating agreement that self-care/independent living skills were being effectively taught (Table 8) and 3.58-3.77 concerning the positive impact on transition outcomes for SWD in their school/cooperative setting (Table 10). Overall, the three respondent groups by position agreed they had knowledge of self-care/independent living skills and in the utilization and effectiveness of self-care/independent living skills for SWD in secondary transition programs and services in their secondary setting(s).

The mean range for the perceptions of knowledge of social skills was 3.46-3.61 indicating that respondents agreed that they had knowledge of social skills (Table 4). The range for percentage that social skills was utilized in their secondary setting to support transition planning for SWD was 72.6%-83.9% (Table 6). There was a level of difference on the perception of social skills to support transition planning. Secondary special education teachers reported this lowest (72.6%) while special education directors were the highest (83.9%). The mean range for among all positions for the perception of effectiveness was 3.12-3.29, indicating agreement that social skills were being effectively taught (Table 8) and 3.33-3.40 concerning the positive impact on transition outcomes for SWD in their school/cooperative setting (Table 10). Overall, the three respondent groups by position agreed they had good knowledge of social skills and in the utilization and effectiveness of social skills for SWD in secondary transition programs and services in their secondary school setting(s).

The mean range for the perceptions of knowledge of strong student support was 3.35-3.50 indicating that respondents were in agreement that they had knowledge of strong student support (Table 4). The range for percentage that strong student support was 82.9%-85.6% utilized in their secondary setting to support transition planning for SWD was indicating a high

level of usage among all three groups that strong student support was being used to support secondary transition (Table 6). The mean range for the perception of effectiveness among all positions was 3.15-3.32 indicating agreement that strong student support was being effectively implemented (Table 8) and 3.29-3.41 concerning the positive impact on transition outcomes for SWD in their school/cooperative setting (Table 10). Overall, the three respondent groups by position agreed they had good knowledge of strong student support and the effectiveness and utilization of strong student support for SWD in secondary transition programs and services in their secondary school setting(s).

The mean range reported for the perceptions of knowledge of the elements of a strong transition program among all three positions was 3.10-3.46 (Table 4). There was statistical difference as reported by the *F* statistic (4.64, *p*, .05) indicating a level of disagreement. The reported percentage that elements of a strong transition program was utilized in their secondary setting to support transition planning for SWD was 74.2%-88.6% (Table 6). There was a level of difference of perception on elements of a strong transition program. Special education directors were the lowest (74.2%) while special education assistant directors/program coordinators reported this highest (88.6%). The mean range for the perception of effectiveness among all positions was 3.13-3.30, indicating agreement that elements of a strong transition program were being implemented (Table 8) and 3.33-3.46 concerning the positive impact on transition outcomes for SWD in their school/cooperative setting (Table 10). Overall, the three respondent groups by position agreed with the perception of the effectiveness and utilization of a strong transition program for SWD in secondary transition programs and services in their secondary school setting(s). The three groups tend to disagree with the perception of knowledge of a strong transition program.

The reported mean range for the perceptions of knowledge of vocational education among all three positions was 3.05-3.19 indicating that respondents were in agreement that they had knowledge of vocational education (Table 4). The range for percentage that vocational education was utilized in their secondary setting to support transition planning for SWD for utilization was 94.3%-96.8% indicating a high level of usage among all three groups that vocational education was being used to support secondary transition (Table 6). Special education assistant directors/program coordinators were the lowest (94.3%) while secondary special directors reported this highest (96.8%). The mean range for the perception of effectiveness among all positions was 3.19-3.34, indicating agreement that vocational education was being effectively implemented (Table 8) and 3.39-3.49 concerning the positive impact on transition outcomes for SWD in their school/cooperative setting (Table 10). Overall, the three respondent groups by position agreed they had good knowledge of vocational education and the utilization and effectiveness of vocational education for SWD in secondary transition programs and services in their secondary school setting(s).

The mean range for the perceptions of knowledge of work-study programs among all three positions was 2.81-3.12 (Table 4). There was statistical difference as reported by the *F* statistic (3.78) indicating a level of disagreement. Reported in Table 6 are the perceptions of utilization by percentages. The range for percentage that work-study programs were utilized in their secondary setting to support transition planning for SWD was 70.5%-77.1%. There was a level of difference on the perception of utilization of work-study programs. Secondary special education teachers reported this lowest (70.5%) while special education assistant directors/program coordinators were the highest (77.1%). The mean range for the perception of effectiveness among all positions was 3.11-3.27, indicating agreement that work-study programs

were being effectively implemented (Table 8) and 3.30-3.38 concerning the positive impact on transition outcomes for SWD in their school/cooperative setting (Table 10). Overall, the three respondent groups disagreed with the perception of knowledge of work-study programs. The three respondent groups agreed with the utilization and effectiveness of work-study programs for SWD in secondary transition programs and services in their secondary school setting(s).

The perceptions of knowledge of exit exam/high school diploma requirements among all three positions are reported in Table 4. The mean range was 3.39-3.59 indicating that respondents were in agreement that they had knowledge of exit exams/high school diploma requirements. The range for percentage that exit exams/ high school diploma was utilized in their secondary setting to support transition planning for SWD was 87.1%-88.6% indicating agreement (Table 6). Special education directors were the lowest (87.1%) while special education assistant directors/program coordinators reported this highest (88.6%). The mean range for the perception of effectiveness among all positions was 3.26-3.42, indicating agreement that exit exams/ high school diploma was being effectively implemented (Table 8) and 3.23-3.48 concerning the positive impact on transition outcomes for SWD in their school/cooperative setting (Table 10). Overall, the three respondent groups by position agreed they had good knowledge of exit exams/high school diploma and in the utilization and effectiveness of exit exam/high school diploma requirements for SWD in secondary transition programs and services in their secondary school setting(s).

**Summary.** This study examined the perceptions of (a) special education directors, (b) assistant directors/program coordinators, and (c) secondary special education teachers concerning their current knowledge, their school's usage of, and the overall effectiveness of 16 specified evidenced-based transition predictors at the high school level in the state of Indiana and

their impact on post-school outcomes. Of the 16 evidenced-based transition predictors, significant differences were found in (a) interagency-collaboration, (b) elements of a strong transition program, (c) work-study programs, and (d) inclusion practices. However, when post-hoc analysis was completed, only marginal differences were indicated.

The utilization of the 16 evidenced-based transition predictors found levels of difference in 14 of the predictors. They are as follows: career awareness, community awareness, inter-agency collaboration, occupational courses, active parental involvement, programs of related to an academic content area, self-advocacy/self-determination skills, self-care/independent living skills, social skills, strong student support, elements of a strong transition program, work study programs, exit exams/high school diploma, and most concerning, paid employment/work experiences. Vocational education was the predictor most utilized among respondents in all positions; the lowest utilization of a predictor was paid employment/work experiences.

Analysis of the respondents among positions indicated that each group was in agreement of their knowledge, use, effectiveness, and the impact of the 16 evidenced-based transition predictors. The respondent pool was predominately women (82.4%) and secondary special education teachers (82.9%). The predominate age group was 51-50 years (29.1%), were employed in high school setting (46.2%), had earned a MA/MS degree (65.4%), had been in their current position (25.3%), had been employed in their current position for 6-10 years (26.9%), had been in the field of education for more than 20 years (47.8%), worked in a rural setting (54.1%), and taught in a medium size corporation/cooperative.

### **Qualitative Analysis**

This section addressed the qualitative component of the study. Qualitative analysis of the open-ended questions of the survey yielded several themes related to the barriers of

implementation of inclusive practices, self-care/independent living, parental involvement, self-advocacy/self-determination, and paid employment/experiences. Inclusive practices in general education, paid employment/work experiences and self-care/independent living were chosen due to the fact they are predictors in all three post-school outcomes (i.e. education, employment, and independent living). Self-advocacy was a predictor for employment and education while parental involvement was a strong predictor for employment (Test et al., 2009). The three central themes found across all five transition predictors explored further in qualitative analysis were (a) funding, (b) lack of highly qualified staff, and (c) not enough time. All respondents were presented with the opportunity to answer the five open-ended questions. The researcher used SPSS 22.0 to sort the responses to the open-ended questions. It served to allow ease of access to the responses on the open-ended questions in a list format. The researcher was able to create themes by reviewing all of the responses. Key words and phrases were identified by the researcher and these were used to categorize the responses. A chart was created by the researcher and responses were placed in a category dependent on its themes (Creswell, 2009). These questions helped to address specific barriers that are impeding progress in each of these five transition indicators.

### **Research Question 6**

What are the barriers to teaching self-advocacy/self-determination programs as perceived by special education directors, assistant directors and/or program coordinators, and secondary special education teachers?

Self-advocacy/self-determination is defined as the ability to make choices, solve problems and set goals. Table 11 shows the frequency data by position for the three central themes. Not enough time had the highest frequency of responses as indicated by directors ( $N=5$ ),

assistant directors ( $N = 5$ ) and secondary special education teachers ( $N = 14$ ). Funding had the fewest responses for this particular transition predictor as indicated by directors ( $N = 0$ ), assistant directors ( $N = 2$ ) and secondary special education teachers ( $N = 0$ ). Two other prominent themes emerged from the data. In regards to implementing self-determination, the heavy emphasis on academic skill attainment was indicated as a barrier to self-determination. Respondents indicated this as noted by directors ( $N = 3$ ), assistant directors/program coordinators ( $N = 5$ ), and secondary special education teachers ( $N = 6$ ). Responses included statements such as “At the secondary level there is not time to squeeze in any time for an additional course.” “The focus continues to be on academic skill attainment.” Lack of student motivation as a barrier to self-determination instruction was also rated high by secondary special education teachers ( $N = 12$ ). Responses included “A lack of intrinsic motivation within the student” and “Our director is so far way and does not address these needs.” The number of responses that fell into a consistent pattern for each group was (a) 12 directors, (b) 16 special education assistant directors/program coordinators, and (c) 36 special education secondary teachers.

**Summary.** All respondent groups by position indicated lack of time as the largest barrier to implementing self-advocacy/self-determination skills to SWD. The second largest barrier to implementing self-advocacy/self-determination was academic rigor. This was rated the highest by assistant directors/program coordinators and the special education directors. Of the three respondent groups, secondary special education teachers rated this the lowest.



Table 11

*Perceptions of Barriers to Implementing Self-Determination Based on Position*

	Special Education Directors		Special Education Assistant Directors/ Program Coordinators		Special Education Secondary Teachers		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>N</i>	%
<i>Central themes of barriers to self-determination...</i>								
Funding	0	0.0	2	7.0	0	0.0	2	1.3
Lack of HQ Staff	2	7.0	2	7.0	4	5.0	8	5.4
Not Enough Time	5	17.2	5	17.0	14	16.0	24	16.3
Academic Rigor	3	10.3	5	17.0	6	7.0	14	10.0
Student not Motivated	2	7.0	2	7.0	12	14.0	16	11.0
Other Responses	17	59.0	14	47.0	52	59.0	83	56.4
Total	29	100.0	30	100.0	88	100.0	147	100.0

*Note.* Percentages represent data reported by category.

**Research Question 7**

What are the barriers for implementing paid employment/work experiences as perceived by special education directors, assistant directors and/or program coordinators, and secondary special education teachers?

Paid employment/work experiences are defined as any activity that places the student in an authentic workplace including job shadowing, internships and paid employment. Table 12 shows the frequency data by position for the three central themes. Lack of qualified staff had the highest frequency of responses by secondary special education teachers ( $N = 10$ ). Funding was another high frequency response indicated by all three positions, directors ( $N = 3$ ) assistant directors/program coordinators ( $N = 5$ ) and secondary special education teachers ( $N = 6$ ). Three other distinct responses were identified through the analysis of paid employment. These were (a) state of the economy, (b) lack of job placement, and (c) lack of transportation. The lack of job placement was heavily emphasized by all three positions with directors ( $N = 9$ ), assistant

directors/program coordinators ( $N = 8$ ), and secondary special education teachers ( $N = 20$ ).

Responses included “Finding an employer in the difficult economy” and “Having ongoing job sites that can serve and provide ongoing pay for students.” A greater pattern of consistency was indicated in this research question. The number of responses for each group was (a) 29 special education directors, (b) 19 special education assistant directors/program coordinators, and (c) 49 secondary special education teachers.

**Summary.** All respondent groups by position indicated the lack of job placement was the biggest barrier to implementing paid employment/work experiences. The economy as a barrier was rated high from special education directors in addition to lack of highly qualified staff. The lack of highly qualified staff was also echoed by secondary special education teachers. Assistant directors/program coordinators indicated funding was a large barrier, and secondary special education teachers rated transportation as a significant barrier.

Table 12

*Perceptions of Barriers to Implementing Paid Employment/Work Experiences Based on Position*

	Special Education Directors		Special Education Assistant Directors/ Program Coordinators		Special Education Secondary Teachers		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>N</i>	%
<i>Central themes of barriers to paid employment...</i>								
Funding	2	6.0	5	19.2	6	8.0	13	9.4
Lack of HQ staff	9	26.4	2	8.0	9	12.0	20	15.0
Not Enough Time	3	9.0	0	0.0	3	4.0	6	4.3
Economy	5	15.0	3	12.0	6	8.0	14	10.2
Lack of Job Placement	9	26.4	8	31.0	20	26.0	37	27.0
Transportation	1	3.0	1	4.0	8	10.3	10	7.2
Other Responses	5	15.0	7	27.0	25	32.4	37	27.0
Total	34	100.0	26	100.0	77	100.0	137	100.0

*Note.* Percentages represent data reported by category.

### Research Question 8

What are the barriers for ensuring inclusion in the general education setting as perceived by special education directors, assistant directors and/or program coordinators, and secondary special education teachers?

Inclusion practices are defined as access to general education curriculum for students with disabilities that are to occur in regular education classes. Table 13 shows the frequency data by position for the three central themes. Lack of qualified staff had the highest number of responses. Funding was another high frequency response as indicated by directors ( $N = 3$ ), assistant directors/program coordinators ( $N = 2$ ), and secondary special education teachers ( $N = 3$ ). Other barriers that inhibited inclusion were (a) academic rigor, and (b) the attitude of general education teachers. It should be noted that academic rigor was also a high frequency response for self-determination. Responses included, “the rigor of the coursework required to meet state standards and pass the end of course assessments is a barrier.” “Identified students with disabilities that limit their ability to pass a state mandated test without/or with little modifications impede successful completion of the high school experience. Very often it just seems to exclude more those that can pass from those that can’t through the remediation required for passing the test.” The attitude of general education teachers was rated high on this indicator as well. This was indicated by directors ratings ( $N = 10$ ), assistant directors/program coordinators ( $N = 3$ ), and secondary special education teachers ( $N = 11$ ). Responses included “Many general ed. teachers view students as ‘yours’ or ‘mine’ and try to separate out what is their responsibility and what is a special education teacher’s responsibility. Also, indicated was the response, “We need to get to a placed where the students are referred to as ‘ours’ and we all take on the role of providing what is needed.” Other responses included, “Differentiation of instruction is NOT carried out to the

highest potential in the gen. ed. classes. Many teachers say it is my way or no way.” An additional response was “Our cooperative is designed to support out four participating districts regarding low-incidence needs, so our direct programming takes place at a separate facility that has no typical peers.” Once more, there was greater consistency among all three groups with responses to this specific research question. The consistent responses were found among (a) 28 special education directors, (b) 25 special education assistant directors/program coordinators, and (c) 83 secondary special education teachers.

**Summary.** Results of this study indicated that lack of highly qualified staff was the largest barrier to inclusion practices by all respondent groups. Special education directors rated the attitude of general education teachers as a barrier.

Table 13

*Perceptions of Barriers to Implementing Inclusive Practices Based on Position*

	Special Education Directors		Special Education Assistant Directors/ Program Coordinators		Special Education Secondary Teachers		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>N</i>	%
<i>Central themes of barriers to implementing inclusive practices...</i>								
Funding	3	9.0	2	5.4	3	3.0	8	4.4
Lack of HQ staff	9	26.4	14	38.0	48	44.0	71	39.2
Not Enough Time	4	12.0	3	8.1	12	11.0	19	10.4
Academic Rigor	2	6.0	3	8.1	9	8.1	14	8.0
General Educators Attitude	10	29.4	3	8.1	11	10.0	24	13.2
Other Responses	6	18.0	12	32.4	27	25.0	45	25.0
Total	34	100.0	37	100.0	110	100.0	181	100.0

*Note.* Percentages represent data reported by category.

**Research Question 9**

What are the barriers for teaching self-care/independent living skills as perceived by special education directors, assistant directors and/or program coordinators, and secondary special education teachers?

Self-care/independent living skills are defined as skills necessary for management of one's personal self-care and daily independent living. Table 14 shows the frequency data by position for the three central themes. "Not enough time" had the highest frequency of responses as indicated by directors ( $N = 3$ ), assistant directors/program coordinators ( $N = 4$ ) and secondary special education teachers ( $N = 15$ ). Additionally, another barrier frequently indicated for this predictor included academic rigor with ratings from directors ( $N = 3$ ), assistant directors/program coordinators ( $N = 4$ ) and secondary special education teachers ( $N = 9$ ). Lack of follow through at home was rated high by secondary special education teachers ( $N = 11$ ).

Responses surrounding academic rigor included "We have taken away classes to learn how to sew or cook to add algebra and geometry credits to graduate when we can't take care of some of our basic needs. There is no time for that in the school day." "College Prep and Core 40 requirements are taking higher precedence." Responses for lack of facilities included "Inadequate facilities and the pressure that is being placed to push academic skills." "The facilities such as laundry, kitchen bathrooms, showers are needed for community based instruction." All three positions were consistent in their responses with (a) 20 special education directors, (b) 29 special education assistant directors/programs coordinators, and (c) 87 secondary special education teachers.

**Summary.** All respondents by position indicated "facilities not available" as the largest barrier to implementing self-care/independent living skills followed by "not having enough time" and "academic rigor."

Table 14

*Perceptions of Barriers to Implementing Self-Care/Independent Living Skills Based on Position*

	Special Education Directors		Special Education Assistant Directors/ Program Coordinators		Special Education Secondary Teachers		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>N</i>	%
<i>Central themes of barriers to self-care...</i>								
Funding	0	0.0	2	6.0	3	3.1	5	3.2
Lack of HQ staff	2	8.3	1	3.0	7	7.2	10	7.0
Not Enough Time	3	13.0	4	12.1	14	15.0	21	14.0
Academic Rigor	3	13.0	4	12.1	9	9.3	16	10.4
Lack of Home Follow Through	2	8.3	3	9.0	11	11.4	16	10.4
Facilities Not Available	10	42.0	15	45.4	43	45.0	68	44.4
Other Responses	4	17.0	4	12.1	9	9.3	17	11.1
Total	24	100.0	33	100.0	96	100.0	153	100.0

*Note.* Percentages represent data reported by category.

**Research Question 10**

What are the barriers for ensuring parental involvement as perceived by special education directors, assistant directors and/or program coordinators, and secondary special education teachers?

Active parental involvement is defined as active parent participation in all aspects of transition planning, attending meetings, and providing support. Table 15 shows the frequency data by position for the three central themes. “Not enough time” had the highest frequency of responses as indicated by directors ( $N = 3$ ), assistant directors/program coordinators ( $N = 4$ ), and secondary special education teachers ( $N = 15$ ). Other high frequency barriers for this predictor included “lack of parental interest” with ratings from directors ( $N = 9$ ), assistant directors/program coordinators ( $N = 3$ ), and secondary special education teachers ( $N = 15$ ). In addition, “parents having difficulty understanding the process” was indicated as a barrier to

parental involvement by directors ( $N = 4$ ), assistant directors/program coordinators ( $N = 3$ ), and secondary special education teachers ( $N = 7$ ). Responses for this barrier included, “Getting parents to have a buy-in to their child’s educational experience and working with the school to make sure the student is as prepared as s/he can be.” And “parents see the school as responsible for giving their child an education.” Consistency among all positions was not as a tight cluster as the previous questions (Table 12, 13, 14). However, the number of responses for each group was (a) 17 special education directors, (b) 14 special education assistant directors/program coordinators, and (c) 43 secondary special education teachers.

**Summary.** “Lack of parental interest” was rated the highest barrier to active parental involvement by special education directors and secondary special education teachers. The “poverty level of parents” and “not having enough time” were the most indicated barriers among assistant directors/program coordinators. “Lack of parental interest” was also indicated as a significant barrier by secondary special education teachers.

Table 15

*Perceptions of Barriers to Implementing Parental Involvement Based on Position*

	Special Education Directors		Special Education Assistant Directors/ Program Coordinators		Special Education Secondary Teachers		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>N</i>	%
<i>Central themes to barriers of parental involvement...</i>								
Funding	1	4.0	0	0.0	0	0.0	1	1.0
Lack of HQ Staff	0	0.0	0	0.0	3	4.0	3	2.4
Not Enough Time	3	12.0	4	15.3	15	21.0	22	18.0
Parent Difficulty Understanding Process	4	15.3	3	12.0	7	10.0	14	11.2
Lack of Parental Interest	9	35.0	3	12.0	15	21.0	27	22.0

Table 15 *continued**Perceptions of Barriers to Implementing Parental Involvement Based on Position*

	Special Education Directors		Special Education Assistant Directors/ Program Coordinators		Special Education Secondary Teachers		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>N</i>	%
<i>Central themes to barriers of parental involvement...</i>								
Poverty Level of Parent	0	0.0	4	15.3	3	4.0	7	6.0
Other Responses	9	35.0	12	46.1	30	41.0	51	41.0
Total	26	100.0	26	100.0	73	100.0	125	100.0

*Note.* Percentages represent data reported by category.

### Summary

Qualitative analysis of the open-ended questions of the survey yielded three major themes related to the perception of the barriers to (a) self-advocacy/self-determination, (b) inclusion practices, (c) paid employment/work experience, (d) self-care/independent living, and (e) parental involvement. Themes related to the identification of barriers to five of the 16 evidenced-based transition predictors included (a) funding, (b) lack of qualified staff, and (c) not enough time. The most referenced theme among respondents of all positions was “lack of highly qualified personnel” ( $N=117$ ). Respondents indicated highly qualified personnel were needed to assist SWD in accessing the general education environment, to provide transportation needs to help with employment, and to support community involvement. The second most referenced barrier among respondents of all positions was “not enough time” ( $N=91$ ). Respondents indicated there was no time for collaboration with general education teachers, community agencies, and employers. Furthermore, there was no time in the school day to include necessary classes to aid self-care/independent living and employment skills. The third most referenced



barrier among respondents of all positions was funding ( $N=31$ ). Respondents indicated recent budget cuts have had a negative impact on SWDs receiving facilities/supplies for self-care/independent living, transportation to community outings, and employment experiences. Information that is more detailed is provided in Chapter 5 of the impact of all of these barriers.

### **Exploration of Logistic Regression Models**

Logistic regression models were used to determine what characteristics might have influenced the differences in the perceptions of respondents' knowledge of the 16 evidenced-based transition predictors in this study. The analysis examined the potential impact (predictive value) the variables of (a) gender, (b) education, (c) age, (d) position, (e) size of cooperative/corporation, and (f) years in education may have had on respondent's perceptions. The dependent variable for this analysis was the respondents' answers to the four point Likert-type scale ratings for the question regarding their perception to the knowledge of (a) inclusion, (b) inter-agency collaboration, (c) elements of a strong transition program, and (d) work-study programs. These were the only survey items found to have significant differences. The scale ranged from 1 = Strongly Disagree to 4 = Strongly Agree with a fifth scale option of "Do Not Know" which was excluded from the analysis as noted above. In order to run the analysis, all given responses of "Do Not Know" were removed from the data set. The removal created the ability to construct the Agree (Agree and Strongly Agree responses) versus Disagree (Disagree and Strongly Disagree) relationship needed for logistic regression analysis. The two new categories were then recoded as (0,) for Disagree and (1) for the Agree in the database for SPSS analysis. The recoded dataset was then used to run logistic regression models based on the following recoded variables: (a) gender, (b) education, (c) age, (d) position, (e) size of cooperative/corporation, and (f) years in education. The researcher, with the assistance of her

committee chair, explored several logistic model configurations and did not have consistently viable results. Most logistic regression models, based on the evidenced-based transition predictors identifies as significant using ANOVA were not statistically significant or viable logistic regression models. Several iterations, with numerous combinations of predictor variable recoding, yielded marginal or no significance in predictive value. The data for the two models that were viable were inconsistent and indicated no “added value” to an analysis reported from the analysis of variance (ANOVA) data in Table 4. Therefore, logistic models were not reported here.

## **CHAPTER 5 – SUMMARY**

This study utilized a mixed method research design and was exploratory in nature. Specifically, the purpose of this study was to examine the perceptions of (a) special education directors, (b) assistant directors/program coordinators, and (c) secondary special education teachers concerning their current knowledge of their school’s usage of, and the overall effectiveness of 16 specified evidenced-based transition predictors at the high school level in the state of Indiana and their impact on post-school outcomes for SWD. The study also examined the barriers to positive post-school outcomes faced by secondary SWD including implementation of paid employment/work experiences, inclusion in the general education setting, self-care/independent living skills, self-advocacy/self-determination skills, and parental involvement. A survey instrument was created and distributed electronically to participants. The data were analyzed using descriptive and inferential statistics. Ten (10) research questions were developed for the study. These questions investigated the perceptions of knowledge, utilization, and the effectiveness of the 16 evidenced-based transition predictors. These predictors were identified through research conducted by David Test, Valerie L. Mazzotti, April L. Mustian, Catherine

Fowler, Larry Kortering, and Paula Kohler (see Test et al., 2009b). An extensive literature review was conducted. For literature to be included in this review, the study review had to include (a) predictor variables related to transition, and (b) outcome variables related to post-school education, employment, and independent living (Test et al., 2009b, p. 162). Furthermore, in the current study, barriers to five specific evidenced-based predictors were analyzed. These included (a) parental involvement, (b) self-advocacy/self-determination, (c) self-care/independent living, (d) inclusion, and (e) paid employment/work experience. These indicators have substantiated research associated with outcomes for transition. (Test et al., 2009b; Wehman, 2013a). Furthermore, state and local education agencies need to ensure programs for self-care/independent living, paid employment and inclusion in the general education curriculum are offered (Test et al., 2009b). Subsequent analyses were conducted that examined the respondents' perceptions of barriers to these specific post-secondary transition predictors.

### **Sample and Returns**

An electronic survey was sent to the study participants through a link embedded in the Internet e-mail request. The survey was created, disseminated, and housed utilizing BSU Qualtrics, a survey and statistical management software program. Analysis was conducted using the Statistical Packages for Social Sciences (IBM SPSS 22.0).

Initial contact regarding survey distribution was directed to special education directors. Once permission to email the director's perspective school corporation(s) was obtained, the superintendent was sent an e-mail letter seeking approval for the study to be conducted within the identified school corporation. After the superintendent's permission had been obtained, the secondary building level principal was sent an e-mail letter seeking permission to survey

secondary special education teachers within his/her building. Once all permissions had been obtained (directors of special education, superintendents, high school principals), the survey was distributed via email to 268 potential participants. The distribution list included 42 special education directors, 51 special education assistant directors/program coordinators, and 175 secondary special education teachers. Respectively, each e-mail contained a link that directed participants to the online survey. Qualtrics generates a 15 letter-digit code that was associated with the respondents. The study involved an eight-week survey period. Follow-ups were sent every two weeks with the exception of Thanksgiving Break. Of the 268 surveys distributed, 182 valid surveys were completed (return rate 67.9%) (Table 1). The information gathered was analyzed using descriptive statistics, including frequencies and percentages. ANOVA F and Welch-F tests, Bonferroni and Tamhane post-hoc tests, and Kruskal-Wallis mean ranks tests were used to analyze differences among respondent groups' perceptions. The researcher completed qualitative analysis by reporting by central themes and frequencies. This allowed for further examination of additional factors indicated by respondents that contributed to their perception of the barriers to five of the predictors.

## **Discussion**

The following discussion highlights study findings in relationship to the 16 evidenced-based transition predictors and their supporting literature.

### **Career Awareness**

The data from this study's findings suggested that there were no statistical differences among the three (3) groups of respondents regarding the perception of knowledge, use, or effectiveness of career awareness (Table 4, 6). This data suggests all three respondent groups by position agreed that (a) they had comprehensive knowledge of career awareness; (b) career

awareness was being used as part of their secondary education program services for SWD; and that (c) career awareness was effectively implemented and has a positive impact on successful post-secondary transition for SWD in their school setting (Table 8, 10). The literature indicated that career awareness is the first step in implementing successful post-secondary success (Brolin, 1992; Cobb & Alwell, 2009; Kohler, 1996). Career awareness needs to be developed in the early stages of school to assist SWD to develop feelings of self-worth and confidence. It creates a motivation to learn and to attend school (Brolin & Gysbers, 1989). Guidance counselors can assist special education teachers in implementing specific strategies to help SWD with course work for detailed career paths. Guidance activities can assist SWD to discover his/her potential and to become aware of acceptable work behavior. Guidance counselors can help SWD develop interests and explore abilities in order to facilitate successful post-secondary transition (Brolin & Gysbers, 1989). Career awareness has several advantages such as (a) identifying particular intervention strategies; (b) facilitating the structure of the work experience; and (c) promoting understanding of individual differences that can strengthen a student's program (Fabian et al., 1998). Respondents in the current study tended to support the existing literature in emphasizing that career awareness was needed for students with disabilities. However, it should be noted 6.1% of the respondents indicated that they were not utilizing career awareness and 8.3% did not know if they were utilizing career awareness in their school settings to support post-secondary transition for SWD. This data is not alarming in and of itself but collectively, 14.4% of respondents indicated they were not utilizing or did not know if career awareness was being utilized to support secondary transition programs and services for SWD in their secondary school setting. The function of many guidance departments in Indiana's high school settings is to help students develop career awareness. In addition, secondary special education teachers have the

responsibility of providing career awareness as part of the transition IEP. There may need to be better coordination between special education personnel, specifically secondary special education teachers, and the guidance department. Although there was no data collected from guidance personnel, there is speculation that there is a disconnect between secondary special education teachers and guidance counselors. This warrants further investigation. A collaborative working relationship needs to be place in order to support SWD in career awareness activities. This indicated that overall special education directors, assistant directors/program coordinators, and secondary special education teachers in the state of Indiana are adequately preparing students with disabilities in the area of career awareness, yet some local school settings need to revisit career awareness as an important transition predictor of post-school outcomes.

### **Community Awareness**

This study indicated that there was no statistical difference among the groups of respondents regarding the perception of knowledge, use, or effectiveness of community awareness (Table 4, 6). Overall, 77.3% responded that they were utilizing community awareness as part of secondary transition programming. However, further investigation is warranted. Special education assistant directors/program coordinators and special education teachers reported they do not use community awareness in their transition programs and services 11.1% and 13.1% respectively. Furthermore, special education assistant directors/program coordinators and special education teachers reported they do not know if they use community awareness 11.1% and 12.1% respectively in their secondary transition services and programs. These data suggest that while the majority of respondents indicated their local education agencies (LEA) were using community awareness for SWD in secondary transition programs and services, and that community awareness was effectively implemented and has a positive impact on successful

post-secondary transition for SWD in their school setting (Table 8, 10). In addition, almost one-quarter (22.7%) of respondents either did not know if they were utilizing community awareness or indicated they were not using community awareness. Findings from the literature indicated that community awareness is a strong predictor of successful post-secondary success. Having foundational knowledge of the community assists SWD in the following ways: (a) live in independently, (b) determining career direction, (c) maintaining meaningful employment, (d) establishing gratifying relationships, and (e) choosing leisure activities (Kellems & Morningstar, 2010; Kohler, 1996; Lehman et al., 2002). Analysis in this study indicated respondents tended to agree with the existing literature in knowledge and effectiveness that community awareness was needed for students with disabilities. However, this study indicates almost one-quarter of special education personnel are not utilizing or do not know if they are utilizing community awareness was part of their secondary transition programming to support SWD. This may indicate that secondary special education personnel need to re-examine community awareness as an important transition predictor and implement effective transition into community awareness programs. In addition, this could mean incorporating partnerships with local businesses and area recreation programs. Community mapping is another tool educators could implement. Community mapping includes targeting the community's resources, housing, businesses, recreational opportunities, and social services providers. This allows opportunities for SWD to learn about their community's resources and culture (Wehman, 2013a). Research has demonstrated the effectiveness of utilizing instruction to educate SWD of skills needed for successful community participation once their school career has ended (Alwell & Cobb, 2006; Kellems & Morningstar, 2010; Kohler, 1996). An example would be to teach students the concept of time delay. This would assist them in learning how to cross streets safely. Other teaching strategies can focus on

teaching students how to protect themselves while out in the community (Alwell & Cobb, 2006, Kellems & Morningstar, 2010, Wehman, 2013).

### **Inclusion Practices**

Inclusion efforts have gone well beyond mainstreaming. The current education movement focuses on “substantive inclusion” as opposed to just “physical inclusion.” This requires a greater deal of effort on the part of general and special educators (Bassett & Smith, 1996). A small, yet, statistically significant difference was found among respondent groups in the area of inclusion practices (Table 5). Although post-hoc analysis found no statistically significant difference between the separate groups (Table 5). Many respondents indicated that they were using strong inclusion practices and these practices were effectively implemented and have a positive impact on successful post-secondary transition for SWD in their school setting (Table 6, 8, 10). Authentic inclusive practices have a measureable impact on student learning for students with and without disabilities. Some of the benefits surrounding inclusive schools include (a) differentiated instruction increases student engagement; (b) academic supports assist all students; (c) a respect for diversity; and (d) inclusive practices make effective use of a school’s resources (Inclusive Schools, n.d.). Although a statistical difference was indicated ( $p < .05$ ) in preliminary analyses, in practical terms all three groups agreed with knowledge, use, and effectiveness of inclusion practices. In addition, it is important to note that 11.3% of the respondents (Table 6) indicated they did not use or did not know if their corporation/cooperative was utilizing inclusion practices. Special education directors and secondary special education teachers indicated inclusion was not being utilized (12.1% and 5.5% respectively). It should also be noted barriers exist to inclusion practices in schools. The current educational reform, with heavy emphasis on academic rigor and accountability, was perceived by all three groups to be a barrier to inclusion



at the secondary level. Also noted as a barrier by special education directors, was the “negative attitude” of some general education teachers toward inclusion practices. This perception aligns with research conducted with secondary general education teachers regarding inclusion (Smith, 2000). Administrative guidance will need to play an important role to overcome these barriers. Minimally, general education teachers may need attitude and awareness training regarding SWD. Inclusion is not just a place. The importance is found in the learning opportunities that are provided in the inclusive setting. It should be expected that general education teachers implement varied strategies to assist SWD. All teachers, special education and general education, need to learn better methods of accommodating SWD and collaboration skills. In the present educational environment, collaboration of all educators is expected (Smith, 2000; Worrell, 2008). It is important all teachers understand the mandates surrounding access to the general education environment as well as proper accommodations, modifications, or technology assistance for SWD. Moreover, consideration needs to be given to teaching assignments, scheduling of classes, time for planning, and allocation of resources (Wehman, 2013a). The allocation of resources also needs to be considered for staffing, and administrative guidance is needed to restructure and align collaborative practices. Furthermore, 13% (Table 9) of the secondary special education teachers did not know the impact of inclusion practices. There is a responsibility on the part of the secondary special education teachers to address the amount of time a SWD spends in the general education environment. At a minimum, the amount of time a SWD is in the general education environment needs to be reviewed annually. These results indicate secondary special education teachers may need professional development in inclusion practices and the impact it has on SWD in addition to the understanding the importance of SWD accessing the general education environment.

## **Inter-agency Collaboration**

A statistically significant difference was found between respondent groups with the predictor inter-agency collaboration (Table 4). Special education assistant directors/program coordinators had higher ratings of inter-agency collaboration, indicating that their school corporations were engaged in interagency agreements to support SWD in transition activities and services post-graduation, compared to those reported by secondary special education teachers. Twenty-five percent of the secondary special education teachers did not know or did not use inter-agency collaboration in their current transition programming services for SWD. This indicates that for a percentage of special education teachers, they may have not built strong relationships with outside agencies that assist SWD after leaving high school. The literature points to the many benefits of inter-agency collaboration. This includes, but is not limited to, the commitment to the development and implementation of services and active involvement from team members. It is important for schools to build partnership with various state and local agencies in addition to implementing a clear method of sharing communication and coordinating services. The partnership needs to utilize student and family centered strategies to promote participation (Bullis & Davis, 1995; Kellems & Morningstar, 2010; Kohler, 1996; NCSET). The lack inter-agency collaboration utilization among secondary special education teachers is a noted concern. Furthermore, 14.7% of the special education directors did not know the impact of inter-agency collaboration. This finding aligns with research conducted by Li, Bassett and Hutchinson, (2009). They found one of the two least frequently used transition predictors rated by educators was inter-agency collaboration (Li, Bassett, & Hutchinson, 2009). Research indicates public agencies are invaluable in the transition process (Johnson et al., 2002; Li et al., 2009). However, like public education, public agencies are shaped in governmental policy and issues. There are

concerns with the information flow between the school and agency. It is also necessary to close the gap that may exist so SWD can move into employment positions. The focus needs to be on concrete outcomes for SWD (Bullis & Davis, 1995; Benz et al., 2000; Kaehne & Beyer, 2009 ). The flow of information needs to be effective and should involve a variety of stakeholders. For the process to be meaningful, special education directors and assistant directors/program coordinators need to assist secondary special education teachers with (a) emphasizing that students and parents need to be included as stakeholders; (b) with educating secondary special education teachers about community resources and services; and (c) with identifying primary case management for SWD. Research has shown students with specific learning disabilities, emotional disabilities, and students in rural areas have more difficulty accessing services (Wehman, 2013a). Since the state of Indiana has many rural areas, it is important for special education personnel to fully collaborate to obtain necessary services. The findings from this study indicate the transition predictor inter-agency collaboration is not being utilized effectively in the state of Indiana. Results of this study indicated 14.3% (Table 9) of the special education directors did not know the impact of inter-agency collaboration. This is unfortunate as directors are often the personnel in charge of attending state meetings where many state agency representatives are present. Directors need to ensure special education teachers are well versed on the types of agencies/services available to SWD. Special education directors can assist in making connections for the corporations/cooperatives. Presently, there are 25 regional vocational rehabilitation (VR) offices in Indiana. However, it should be noted some agencies are a distance for some potential clients (one-hour or more drive). For example, currently clients in Adams and Wells Counties must drive to Muncie, Indiana in order to obtain VR services. The same is true for Bureau of Developmental Disabilities Services (BDDS). There are only eight district offices

in Indiana. Agency administrators need to ensure there is adequate staff and time to assist the school with the needs of the students (Brolin, 1992). Unfortunately, data from this study tends to support research documenting the educational programming and the connection to adult services was deficient (Roessler, 2000). This study indicates special education personnel in Indiana need to revisit the importance of inter-agency agreements as an important transition predictor.

Currently the Indiana Secondary Transition Resource Center has implemented a work group to review the collaboration of inter-agencies and public schools in Indiana. Their goals include maximizing federal, state, and local fiscal resources to provide services to SWD. The work group includes (a) special education directors, (b) vocational rehabilitation services, (c) Department of Workforce Development Youth programs, (d) family and social services, (e) IN\*Source, (f) Bureau of Developmental Disabilities Services, and (g) Department of Corrections. The current action plan includes developing a policy-to-practice report for special education personnel in the state of Indiana. The goal is to revitalizing the collaboration among school and agencies for SWD will increase successful transition programs and services for SWD (Teresa Grossi, personal communication, July 10, 2014).

Of the respondents who indicated they were using inter-agency collaboration as part of their secondary transition program, most indicated these practices were effectively implemented and have a positive impact on successful post-secondary transition for SWD in their school setting (Table 8, 10).

### **Occupational Courses**

The data from this study's findings suggested that there was no statistical difference among the groups of respondents with the perception of knowledge, use, or effectiveness of occupational courses (Table 4, 6, 7). This data suggests all three respondent groups tended to

agree that that they had (a) comprehensive knowledge of occupational courses, (b) occupational courses were being used as part of their secondary education program services for SWD, and (c) occupational courses were effectively implemented and have a positive impact on successful post-secondary transition for SWD (Table 8, 10). Literature review findings indicated occupational specific instruction contributes to better transition for SWD (Benz et al., 2000). Students who participate in occupational courses have the opportunity to explore career pathways and develop occupational skills needed for employment. There are various ways to embed occupational courses into the curriculum, which include, but are not limited to, designing a curriculum to include technology, employability skills, community based activities, and universal design for learning principals (Benz et al., 2000; Halpern et al., 1995; Phelps & Maxwell, 1997). Students with disabilities who successfully complete instruction in occupational courses have a higher likelihood of participation in post-secondary education (Halpern et al., 1995; Wagner & Blackorby, 1996). Respondents in the current study tended to support the existing literature in emphasizing that occupational courses were needed for students with disabilities; however, 19.8% indicated they did not know or did not utilize occupational courses in the transition services or programs for SWD. Furthermore, 12.9% of secondary special education teachers did not know if occupational courses were being utilized by SWD. This is concerning as transition planning and the necessary coursework is to be discussed annually at case conference. In the state of Indiana, the percentage of students enrolling in a career or technical course has risen to 67% (Indiana Department of Education [IDOE], 2014). It could be assumed this increase includes SWD. Yet, this needs further investigation. An example of this is Area 18 Career and Technical Education in Bluffton, Indiana. In the 2010 - 2011 school year 853 students with disabilities attended Area 18. By 2012 - 2013, 1,025 students attended Area 18.

This represents a 20% at Area 18 in the increase of SWD obtaining some type of occupational coursework (Department of Workforce Development, 2012-2013). This points to a concern that there is a detachment between the course selection and planning process and the needs being addressed in the IEP. Special education directors and special education assistant directors/program coordinators need to ensure that secondary special education teachers understand the significance of their responsibility of coordinating transition and IEP services. Secondary special education teachers need accountability in fulfilling the requirements of the legal framework of transition. Communication and collaboration are needed among all stakeholders to ensure occupational courses are provided for SWD.

### **Paid Employment/Work Experience**

No statistical difference was found between any of the respondent groups with the transition predictor paid employment/work experience (Table 4, 6, 7). However, there was a level of disagreement with the utilization of this predictor. Only 61.5 % of secondary special education teachers responded that they utilize paid employment/work experiences while 75% of the special education directors indicated their cooperative/corporation utilizes paid employment/work experiences for SWD as an option or opportunity in secondary transition programming. Moreover, 38.5 % of the secondary special education teachers indicated they did not know or did not use paid employment/work experiences in their current transition programs and services for SWD. This is a serious concern for SWD and the transition planning process given the importance and significance of paid employment/work experience on positive post-school outcomes. Participation in a paid work experience, especially in the last two years of secondary education, leads to successful employment after high school (Benz et al., 2000). Research indicates SWD who participate in paid employment/work experiences have greater

transition success. Moreover, school-based employment is positively tied to more stable employment and fringe benefits. Another advantage to SWD with disabilities having jobs is the connection they have to other SWD looking for employment (Benz et al., 2000; Fourquarean et al., 1991; Kohler, 1996; Shandra & Hogan, 2008). Further analyses of the qualitative data gathered on this predictor indicate the present condition of the economy increases difficulty with finding job placements for students with disabilities. This has prohibited schools from obtaining ongoing job sites that can serve students with disabilities. Other obstacles that make paid employment/work experiences difficult are lack of transportation and qualified personnel. The education reform agenda with its emphasis on academics and meeting annual yearly progress (AYP) have limited schools on paid employment class offerings. Comments made in the qualitative data state with budget cuts, schools have had to alleviate the job coach position. This creates a situation where students cannot leave the building due to lack of supervision. In addition, teachers commented there was not enough time to implement this course due to students needing remediation for the current state assessment of academic skills. There is a need to blend the rigors of mandated state assessment with individual student needs. In addition, responses included finding employment when the local economy was poor. Many of the rural schools reported the small businesses could not provide paying jobs to students. In summary, respondents agree on the knowledge and effectiveness of paid employment/work experiences as reported by research conducted. However, there are significant barriers to increasing the utilization due to elements outside of the school's environment. Special education personnel can be cognizant of the skills needed to participate in the local environment and embed those in the curriculum.

There is a myriad of literature supporting the importance of employment opportunities for students. Either paid or unpaid work experiences are one of the most important transition predictors supported by research (Benz et al., 2000; Bullis & Davis, 1995; Carter et al., 2008; Phelps & Maxwell, 1997; Wehman, 2013a). There is a significant need to prepare students for the world of work in the environment for which they will be working (Sitlington & Frank, 1990). Findings from the 2012 Post-High School Follow-Up indicate 71% of SWD were employed after leaving high school. However, only 42.0% were making at or above minimum wage (Spradlin & Hiller, 2012). Although the respondent groups tend to agree with the perception of knowledge and effectiveness, the level of difference with utilization indicates that special education personnel in Indiana corporations/cooperatives may not be implementing adequate paid employment/work experiences for SWD in their transition programs and services.

Of the respondents who indicated they included paid employment/work experiences as part of their secondary transition program, most indicated these practices were effectively implemented and have a positive impact on successful post-secondary transition for SWD in their school setting (Table 8, 10).

### **Active Parental Support**

The data from this study suggested that there was no statistical difference among the groups of respondents with the perception of knowledge, use, or effectiveness of active parental support (Table 4, 6, 7). This data suggests all three respondent groups agreed that (a) they had comprehensive knowledge of active parental support; (b) active parental support was being used as part of their secondary education program services for SWD; and (c) active parental support was incorporated in secondary transition programs and has a positive impact on successful post-secondary transition for SWD (Table 8, 10). However, nearly one-quarter of the secondary



special education teachers did not know (6.5%) or did not use (15.7%) active parental support in their secondary transition programs and services for SWD. Special education directors stated they did not use active parental support (18.8%). Furthermore, special education directors indicated they did not know the impact of active parental involvement 16.0% (Table 9). This could be due to the nature of a director's job. In many special education cooperatives, the director serves as the CEO of the organization with managerial tasks including budgeting, human resources, and compliance mandates. They do not often attend many case conferences to know if parents are attending and involved. Research has indicated many parents do not participate in the annual case review (ACR) of SWD. There are many reasons for this; however, some of the most common are lack of transportation, economic burdens, and language barriers (Roessler, 2000). Findings indicated students with disabilities, who had one or more parents who participated in a greater percentage of IEP meetings during the 11th and 12th grade year, were more likely to be engaged in post-school employment as well as had greater stability in their employment status (Fourqurean et al., 1991; Kellems & Morningstar, 2010; Kohler, 1996). Qualitative data indicated the economy might affect parental involvement. Many parents are unable to receive time off from work in order to come to a school conference. Other barriers are the supports needed to help parents in the understanding of the transition process in addition to the importance of parental involvement. Comments included that some parents believe that transition is the school's job and they do not want to assume responsibility. Secondary special education teachers indicated a need for a transition coordinator; however, with recent budget cuts, this position in many school corporations in Indiana has been eliminated. One of the largest barriers reported by teachers is time. Assistance may be needed to guide educators on recommended practices to facilitate parent participation. They may need to understand what is working to

increase parent participation (Benz et al., 2000; (Bullis & Davis, 1995; Kellems & Morningstar, 2010). One excellent resource for school personnel is the Harvard Family Research Project (Harvard Family Research Center, n.d.). Other approaches to improve active parent support include (a) establish a positive time and setting for the meeting; (b) have positive comments and interchange during the meeting; and (c) have feedback and follow-up strategies in place (Roessler). Respondents in the current study tended to support the existing literature in emphasizing high levels of parental involvement were needed for students with disabilities. This indicated that overall special education directors, assistant directors/program coordinators, and secondary special education teachers in the state of Indiana tended to agree with perception of knowledge, usage, and effectiveness of high level of parental involvement for students with disabilities. Yet some local schools will need to revisit active parental involvement as an important transition predictor of post-school outcomes for SWD. Parental involvement in the transition process for SWD will enhance the quality of post-secondary success. Special education personnel need to have the knowledge that parents play a critical role in successful transition services.

### **Programs of Study Related to an Academic Area or Vocational Field**

The data from this study found no statistical significance among the respondent groups concerning programs of study related to an academic content area (Table 4, 6, 7). However, there was a practical level of difference indicated by the respondents with their perception of utilization of programs of study to support SWD in transition programming at the secondary level. Special education teachers have the highest perception of utilization of a program of study to support SWD in transition programming at the secondary level (76.6%) while special education directors had the lowest perception of utilization (59.4%) (Table 6). This practical

difference could be due to the teachers being actively involved in the course selection process and IEP case conference committee meeting process more frequently than the special education directors. Of respondents, 15.4% indicated they did not know if they utilized programs of study related to an academic content area. Moreover, 13.1% of the secondary special education teachers did not use programs of study related to an academic content area (i.e. curriculum focus or college/career pathway) to support secondary transition programs or services for SWD in their school setting. Comparisons of perceptions based on all three groups indicate a level of agreement of the perceptions of knowledge and effectiveness of programs of study related to an academic content area or vocational field. Enrollment in academic programs or a vocational field has been found to have a positive effect on post-secondary education. SWD who enrolled in academic content courses were 22% more likely to enroll in post-secondary education (Wagner & Blackorby, 1996). In addition, SWD who participated in school-based programs had more positive post-school outcomes in (a) annual income, (b) stable employment, and (c) full-time work. In addition, secondary transition programs that incorporate academic and work proficiency hold promise for SWD (Shandra & Hogan, 2008).

Of the secondary special education teachers, 15.9% did not know if programs related to an academic program were being utilized for SWD. This is concerning as transition planning and the necessary coursework is to be discussed annually at the SWD's case conference. This may indicate there is a detachment between the academic program planning and the student's needs being addressed in the IEP. Special education directors and special education assistant directors/program coordinators need to ensure that secondary special education teachers understand the significance of their responsibility in coordinating transition and IEP services. Secondary special education teachers need accountability of the legal framework of transition.

Of the respondents who indicated they were using a structured program of study related to an academic area or vocational field as part of their secondary transition program, most indicated these practices were effectively implemented and have a positive impact on successful transition for SWD in their school setting (Table 8, 10).

### **Self-Advocacy/Self-Determination**

Reported in Table 11, the respondents indicated time and academic rigor were barriers to teaching self-advocacy/self-determination skills. Comments included there was no time to “squeeze in another course.” In addition, lack of teachers to teach the course was also mentioned. The results of this study are contradictory with research conducted by Wehmeyer et al. (2004). According to Wehmeyer et al. (2004), there are two approaches to promote self-advocacy/self-determination. One approach is to identify general education curricula that contain skills and knowledge related to self-advocacy/self-determination for all students. The second approach is to promote access to the general education curricula with proper modifications and adaptations. Hence, academic rigor promotes self-advocacy/self-determination, thus alleviating the need to create time for an additional class. This has been a recommended practice for SWD in addition to being linked with more positive academic gains (Wehman, 2013a). Data from these results indicate special education directors, assistant directors/program coordinators, and secondary special education teachers agree on the perception of the knowledge and effectiveness of self-advocacy/self-determination skills. These results align with research conducted by Wood, Karoven, Test, Browder, and Algozzine (2004). This study found secondary special education teachers viewed self-determination as an important skill for SWDs. Furthermore, findings from the literature review indicated self-advocacy/self-determination skills create greater positive academic outcomes in addition to greater successful transition outcomes for SWD (Cobb et al.,

2009). However, there was a level of difference in the perceptions of respondents on the utilization of SWD attaining these skills. Of the respondents in this study, 15.2% (Table 6) indicated they did not know or did not stress self-determination/self-advocacy skills for SWD in their transition programs or services. The highest percentage of not promoting self-determination was indicated by secondary special education teachers. This could be due to a misunderstanding by the respondents on how to incorporate the components of self-advocacy/self-determination. Moreover, special education directors (15.4%) did not know the impact of self-determination/self-advocacy (Table 9). Indiana is starting to build capacity in understanding the components of self-advocacy/self-determination. The Indiana Secondary Transition Resource Center conducted a conference for the Northeast Special Education Cadre on self-determination/self-advocacy. Special education directors, assistant directors/program coordinators, and secondary special education teachers attended. The presenter was Dr. Catherine Fowler from NSTTAC. The goal was to assist special education teachers in the definition of self-determination/self-advocacy and the importance of putting emphasis on these skills. It is the first step in building capacity for secondary special education teachers to understand and implement self-determination/self-advocacy skills for SWD (Teresa Grossi, personal communication, February 25, 2014). Although the data from this study suggest the majority of special education personnel indicated their LEAs were using self-determination/self-advocacy skills for SWD, some local school settings need to revisit self-determination/self-advocacy as an important transition predictor of post-school success. Targeted professional development about self-advocacy/self-determination will assist teachers in understanding the importance of this predictor.

Of the respondents who indicated they were teaching self-determination/self-advocacy skills as part of their secondary transition program, most indicated these practices were effectively implemented and have a positive impact on successful transition for SWD in their school setting (Table 8, 10).

### **Self-Care/Independent Living Skills**

Respondents agreed that they had comprehensive knowledge of self-care/independent living skills, and study results indicated that those who were using self-care/independent living skills as part of their secondary transition program services agreed that this was an effective practice for SWD. However, there was a level of disagreement on the utilization between special education directors and secondary special education teachers. A total of 12.6% of the respondents indicated they did not know or did not use self-care/independent living skills in their current school based transition programs and services for SWD. Of the secondary special education teachers, 12.1% indicated they did not use self-care/independent living skills. Review of the qualitative results indicated that secondary special education teachers did not have enough time or adequate facilities that hindered the implementation and successful programming for the development of proper self-care/independent living skills. In addition, the current state education reform with emphasis on academic rigor, has led to decreased offerings or the elimination of family and consumer science classes and technology education classes due to budget cuts. However, research has found achieving academic skills is not sufficient for improving post-school outcomes for SWD (Benz et al., 2000). This decreases opportunities for students to learn life skills. The results from this study indicate students with disabilities may not be receiving necessary life skills instruction. This correlates with research on the inclusion movement of the 1990's. The current education agenda has increased academic accountability and shifted away

from necessary life skill instruction (Alwell & Cobb, 2006; Benz et al., 2000; Clark et al., 1994). Life skills instruction is especially important for students with disabilities. The Rehabilitation Act Amendments indicate that individuals with disabilities have the right to (a) live independently, (b) make choices, (c) contribute to society, and (d) pursue meaningful careers (Americans with Disabilities Act of 1990, 42 U.S.C.A. § 12101 *et seq.*; Clark et al., 1994). Furthermore, there is a link between life skills acquisition and quality of life (Alwell & Cobb, 2006). When a person improves his /her life skills, his/her independent functioning and social competence increase. Such things as community participation is critical to SWD as it can help build interpersonal relationships. Furthermore, this creates an opportunity to learn social norms and expectations. Moreover and perhaps most importantly, daily living skills provide personal fulfillment (Alwell & Cobb, 2006). Some local school settings need to revisit self-care/independent living as an important transition predictor of post-school outcomes.

Of the respondents who indicated they were teaching self-care/independent living as part of their secondary transition program, most indicated these practices were effectively implemented and have a positive impact on successful transition for SWD in their school setting (Table 8, 10).

### **Social Skills**

Overall, the three respondent groups by positions tend to agree with the perception of knowledge and effectiveness of social skills; however, there was a level of difference of utilization. Overall, 23.8% of the respondents did not know or did not utilize social skills in their transition programs or services for SWD. This could indicate students with disabilities are not having the opportunity to learn and acquire needed social skills for successful transition. Additionally, 15.4% special education directors did not know the impact of social skills (Table

9). This could indicate that special education personnel may not be accurately defining the social needs of SWD.

Acquiring social skills is important to students with disabilities. Social skills instruction teach students with disabilities effective social problem-solving, such as reading other's feelings and being able to express and label their emotions. These skills are necessary to enhance students' opportunities to explore and build employee, community, and colleague relationships (Brolin & Gysbers, 1989; Doren & Benz, 1998; Halpern et al., 1995). Additionally, social skills acquisition is helpful in obtaining viable employment (Leonard et al., 1999). Research has indicated that the lack of necessary social skills is (a) the most common reason for job termination, and (b) the most commonly reported problem among SWD in the workforce (Phelps & Maxwell, 1997). Collaboration among all stakeholders needs to address limitations and challenges in the area of social skills development of SWD. Some school settings will need to revisit social skills as an important predictor of post-school success for SWD. There needs to be the understanding that SWD may have limited communication skills and this will hinder post-secondary success. Training in social skill awareness can assist secondary special education personnel build an understanding to assist SWD in this area.

Of the respondents who indicated they were offering specific training on social skills as part of their secondary transition program, most indicated these practices were effectively implemented and have a positive impact on successful transition for SWD in their school setting (Table 8, 10).

### **Strong Student Support**

Data from this study's findings indicate that there were no statistical differences among the groups of respondents with their perception of knowledge, use, or effectiveness of strong



student support. The data also suggests all three respondent groups agreed that (a) they had comprehensive knowledge of strong student support related to secondary transition services for SWD; (b) strong student support was being used as part of their secondary education program services for SWD; and (c) strong student support had a positive impact on successful post-secondary transition. The literature indicated that strong student support is needed for successful post-secondary success for SWD. These supports may consist of parents, immediate family members, adult mentors, employers, church members, or other adults in the school setting. This network of support can help SWD explore career interests, define goals, and practice self-advocacy skills (Doren & Benz, 1998; Halpern et al., 1995; Roessler, 2000; Wehman, 2013b). Of the respondents, 15.3% indicated they did not know or did not use strong student support for SWD in their current transition programs or services. Although the data from this study suggest the majority of special education personnel indicated their LEAs were using strong student support for SWD (85.6%), some local school settings may need to revisit strong student support as an important transition predictor of post-school success. Research has found that schools need to provide an atmosphere to assist SWD. This includes designing support strategies in the general education environment and community. Additionally, this includes developing accepting learning environments; dissolve stereotypes and negative attitudes toward SWD, and ensuring high expectations (Brolin & Gysbers, 1989).

Of the respondents who indicated they were using strong student support as part of their secondary transition program, most indicated these practices were effectively implemented and have a positive impact on successful transition for SWD in their school setting (Table 8, 10).

### **Elements of a Strong Transition Program**

A statistically significant difference was found between respondent groups in the area of elements of a strong transition program. Further analysis based on categorization as (a) special education directors, (b) special education assistant director/program coordinators, and (c) secondary special education teachers indicated assistant directors/program coordinators had more knowledge of the elements of a strong transition program than did special education teachers (Table 5). Strong transition programs that utilize evidenced-based transition practices have a measureable impact on student learning for students with and without disabilities. This includes moving toward independence and demonstrating competence in community living (Morningstar & Benitez, 2013; Halpern et al., 1995; Kohler, 1996). The data indicated a level of difference between special education directors and assistant directors/program coordinators with the utilization of elements of a strong transition program (Table 6). Special education directors (19.4%) responded that they did not use elements of a strong transition program while special education assistant directors/program coordinators (6.5%) indicated they did not use elements of a strong transition program. Overall, only 79.3% of the respondents by position indicated utilization, while 11.8% stated “No” utilization, and 8.9% indicated they did not know if their corporation/cooperative was utilizing elements of a strong transition program. There was also disagreement on the perception of knowledge. This is cause for concern as all three respondent groups indicated the elements of a strong transition program had a positive impact on post-secondary transition. Nearly 25% of the secondary special education teachers indicated they did not know or did not use elements of a strong transition program. Effective training in the knowledge of transition practices needs to be developed and facilitated with on-going technical assistance (Morningstar & Benitez, 2013). All secondary special education teachers need to be actively involved in the transition process. Results from this study indicate special education

directors, assistant directors/program coordinators, and secondary special education teachers may not have current knowledge or be utilizing the elements of strong transition programs for SWD. Local schools will need to reexamine Article 7 and their local policies and procedures to ensure delivery of elements of a strong transition program. Effort will need to be applied to the emergent thinking of evidenced-based practices in transition services and programs. Professional development and coaching implementation are necessary strategies in order to ensure that secondary special education teachers are equipped with the knowledge of elements of a strong transition program.

The data indicated a level of difference between special education directors and assistant directors/program coordinators with the utilization of elements of a strong transition program (Table 6). Special education directors (19.4%) responded that they did not use elements of a strong transition program while special education assistant directors/program coordinators (6.5%) indicated they did not use elements of a strong transition program. Overall, only 79.3% of the respondents by position indicated utilization, while 11.8% stated “No” utilization, and 8.9% indicated they did not know if their corporation/cooperative was utilizing elements of a strong transition program. There was also disagreement on the perception of knowledge. This is cause for concern as all three respondent groups indicated the elements of a strong transition program had a positive impact on post-secondary transition. Nearly 25% of the secondary special education teachers indicated they did not know or did not use elements of a strong transition program.

### **Vocational Education**

The study’s data indicated that there was no statistical difference among the respondent groups regarding their perception of knowledge, use or effectiveness of vocational education

(Table 4, 6, 7). Overall, 95.9% of all three respondent groups by position agreed that (a) they had comprehensive knowledge of vocational education; (b) vocational education was being used as part of their secondary education program services for SWD to support transition; and (c) vocational education had a significant impact on successful post-secondary transition for SWD in their school setting. Findings from the literature review indicated that vocational education is a strong predictor of successful post-secondary success (Leonard et al., 1999; Harvey, 2002; Phelps & Hanley-Maxwell, 1997; Wagner & Blackorby, 1996). Students with disabilities who participated in vocational education were more likely to be employed after high school (Hasazi et al., 1985; Harvey 2002; Wagner & Blackorby, 1996). Furthermore, SWD who participated in a concentration of vocational classes had incomes approximately \$1,851 per year more than other students did. In addition, the largest benefit from vocational education was to students with mild disabilities. Students with mild disabilities had a 40% greater employment rate than similar students who did not take vocational classes (Wagner & Blackorby, 1996). Research has also found that SWD who complete a highly structured secondary school vocational program had more favorable post-school outcomes (Fabian et al., 1998; Halpern et al., 1995). This predictor had the highest rating of all the 16 evidenced-based transition predictors indicating SWD are receiving vocational education opportunities. A small percentage of special education personnel (4.2%) indicated they did not know or did not use vocational education in their secondary transition programs and services for SWD. This indicated that overall special education directors, assistant directors/program coordinators, and secondary special education teachers are adequately utilizing vocational education in transition programs and services for SWD, and there are positive results based on the ratings of effectiveness of vocational education in post-secondary outcomes.

Of the respondents who indicated they were utilizing vocational education as part of their secondary transition program, most indicated these practices were effectively implemented and have a positive impact on successful post-secondary transition for SWD in their school setting (Table 8, 10).

### **Work Study Program**

A small statistically significant difference ( $p < .05$ ) was found among respondent groups in the area of knowledge of work-study programs. Further post-hoc analysis found no statistically significant difference between the separate groups (Table 5). Although there was agreement on effectiveness and positive impact of work-study programs for SWD, an issue of concern was the lack of work-study programs as part of transition services and programs. Only 71.9% overall indicated their corporation/cooperative was utilizing work-study programs; 14% indicated “No,” and 14% indicated “Do Not Know.” This constitutes 28% of respondents in this study who indicated they did not know or did not use work-study programs to support secondary transition programs and services for SWD in their secondary school setting. A total of 29.5% of secondary special education teachers reported they do not use or do not know if their school uses work study programs for SWD in their transition planning and services. Instructional practices with strong, authentic work-study programs have a measureable impact on student learning for students with disabilities. Some of the benefits surrounding work-study programs include (a) identification of career interest, skills, and abilities, (b) exposure to job requirements, (c) development of critical workplace skills, and (d) selection of appropriate courses of study (Baer & Dennis, 2007; Doren & Benz, 1998; Fabian et al., 1998; Johnson, 2004; Phelps & Maxwell, 1997; Shandra & Hogan, 2008). To increase the utilization of work-study programs, secondary special education teachers could implement job-shadowing experiences for SWD in employment

areas of interest. In addition, they could develop a “small business process” of promoting and selling a product (Kellems & Morningstar, 2010). Actual or replicated job-experiences can assist in building a job resume for SWD. These types of experiences also enhance collaboration and communication with employers who can provide vital information/experiences. Programs that assist SWD to develop ties with developing job opportunities are particularly advantageous. As compared to other countries, schools to work programs are unstandardized (Shandra & Hogan, 2008). It is of concern that more than 25% of secondary special education teachers do not use or do not know if utilization of work-study programs is being implemented. The connection between these programs and transition services is to be implemented in the IEP process. Special education directors and special education assistant directors/program coordinators need to provide guidance to secondary special education teachers to understand the significance in the responsibility of coordinating transition and IEP services. Secondary special education teachers need accountability of their responsibility to the legal framework of transition. Some local school settings need to revisit work-study programs as an important transition predictor of post-school outcomes. The literature has been very clear that work-study programs help SWD develop skills sets which SWD to enable them to enter the competitive job market. These programs allow students to leave secondary education employed and with the ability to live independently.

Of the respondents who indicated they were offering work study programs as part of their secondary transition program, most indicated these programs were effectively implemented and have a positive impact on successful post-secondary transition for SWD in their school setting (Table 8, 10).

### **Exit Exams/High School Diploma**

No statistical difference was found among the respondent groups regarding the perception of knowledge, use, or effectiveness of emphasizing exit exams/high school diploma as part of secondary transition program services. This data suggests all three respondent groups by position agreed that (a) they had comprehensive knowledge of exit exams/high school diploma, (b) exit exams/high school diploma was being promoted as part of their secondary education program services for SWD, and (c) exit exams/high school diploma achievement had a positive impact on successful post-secondary transition for those that indicated using them (Tables 6, 8, 10). Literature reviewed indicated that exit exams/high school diploma is critical to successful post-secondary success (Heal & Rusch, 1995; Wagner & Blackorby, 1996; Shandra & Hogan, 2008). Moreover, students who earn a high school diploma are more likely to (a) have higher rates of job satisfaction, and (b) have greater involvement in post-school employment and/or education (Benz et al., 2000; Harvey, 2002; Shandra & Hogan, 2008). Only 11.8% of the respondent groups indicated they did not use or did not know if their corporation/cooperative was promoting achievement of exit exams/high school diploma for SWD in their transition program and services. However, only 37.6% of SWD in the state of Indiana in 2102 were enrolled in a two or four year college or university. Moreover, only 16.0% of SWD were enrolled in some other form of post-secondary education, excluding two or four year colleges and universities (Spradlin & Hiller, 2012). Local schools will need to reexamine their local policies and procedures to ensure promotion of exit exams/diplomas in their transition programs and services.

### **Conclusion**

Ensuring adequate transition services for students with disabilities has been a major focus of legislation in the field of education for more than two decades. IDEA (2004) raised the

expectations for transition services, in addition to ensure accountability for those services for students with disabilities. This law gave explicit guidance that teachers should be highly qualified and mandated transition outcomes must be a focus of the educational plan. Research has been conducted since the 1980s on the necessity for strong transition programs and services for SWD (Alwell & Cobb, 2006; Halpern, 1985; Kohler, 1996; Wehman, 2013b). In addition, there has been significant research done related to transition services, assistance with strategies, and ideas to develop positive transition programs and services for SWD (Brolin, 1992; Halpern, 1985; Kohler, 1996). Secondary special education teachers and administrators are charged with ensuring transition programs and services are implemented (IDEA, 2004).

Critical to increasing successful transition services for students with disabilities is increasing the knowledge of special education personnel on the 16 evidenced-based transition predictors. There is growing research to assist special educators to provide a framework and starting point for successful transition services (Test et al., 2009b). This research has evaluated the effectiveness of transition practices and identified 16 evidenced-based transition predictors. Furthermore, the NSTTAC provides lessons plan starters for predictors to assist special education teachers in the classroom. In addition, attached to the lesson plan starters are suggestions on how to implement the practice of each predictor. The lesson plans and suggestions assist in breaking down the barriers of “no time” and “no funding.” All materials are accessible on-line and free of charge. The Council for Exceptional Children (CEC) has also increased efforts to assist with effective transition programs and services. They have begun the Division of Career Development and Transition (DCDT) to identify current transition practices in the field (Kellems & Morningstar, 2010). The state of Indiana also has the Indiana Secondary Transition Resource Center (ISTRC). This center provides Tuesday Transition Tips free of



charge to anyone in the state. These weekly tips provide a wealth of information. Examples of the types of information available to special education personnel include inter-agency contact information, ideas for assistive technology implementation, and suggestions on how to write meaningful transition goals. Moreover, the Northeast Cadre has an on-line transition matrix with a variety of transition assessments for secondary special education personnel to use. This matrix allows secondary special education teachers to create individualized transition assessments. The searchable matrix allows the teacher to locate specific assessments based on each transition domain: employment, education, and independent living.

The results of this study highlight that overall there is agreement of the perceptions among the respondents by position of the knowledge, utilization, and effectiveness of the 16 evidenced-based transition predictors. IDEA (2004) directed that transition services and outcomes would be a focal point in secondary special education. However, there appears to be a disconnect between the knowledge and perceived effectiveness of the 16 evidenced-based transition predictors and the actual utilization of the transition predictors. There is concern with 12 of the evidenced-based predictors. A collaborative and cooperative effort by all stakeholders is needed to provide strong transition programs and services to SWD. Attention needs to be given to each of the predictors to produce viable transition programs and services for SWDs. Areas of concerns for utilization were indicated in the following evidenced-based transition predictors: (a) community awareness, (b) inter-agency collaboration, (c) occupational courses, (d) active parental involvement, (e) programs of study related to an academic content area, (f) self-advocacy/self-determination skills, (g) self-care/independent living skills, (h) social skills, (i) elements of a strong transition program, (j) work study programs, (k) exit exams/high school diploma, and most concerning, (l) paid employment/work experiences. IDEA (2004) mandates

that transition programs are in place for SWD. The mandate requires schools to improve all components of transition--education, employment, and independent living. Professional development and training should be provided for secondary special education teachers so they can better understand how to utilize the 16 evidenced-based transition predictors. There appears to be a need to revisit utilization of the 16 evidenced-based transition predictors and create transition programs with fidelity to better serve SWD.

The qualitative findings of the study supported the literature review findings and the implications of the current education reform. The narrative comments from the respondents by position provide insight into the commitment schools have to SWD in addition to the barriers they perceive. The focus on academic rigor and budget restraints are affecting the utilization of self-care/independent living courses, self-determination/self-advocacy implementation, and inclusion. Moreover, the current economy is affecting the opportunities for SWD to enter into paid employment experiences. The Center on Education Policy has indicated that the standards-based education reform, with the link to promotion and graduation, could harm SWD. It takes intensive academic assistance to support SWD in the academic setting for meaningful participation. Additionally, it is time to rethink the funding levels and the requirements of IDEA. Although these mandates have been influential in ensuring SWD equal access, they have also placed considerable demands on public education. These demands include extensive paperwork and money (Center of Education Policy [CEP], 2002, Wehman 2013b). In addition, this study supported the literature in that greater collaboration among general and special education teachers is needed to provide adequate support for SWD in the general educational environment.

Moreover, local secondary special education personnel need to revisit their current practices concerning transition programs and services for SWDs. These services have been

mandated and expected for over 20 years. Legislation has been passed and support at the state level has been given. Yet, it still appears that effective implementation of best practices is an area of weakness for transition services and programs for SWD. Focused efforts are required to prepare students for post-secondary success. The requirements of transition need to move beyond compliance. The Indiana Department of Education Division of Exceptional Learners will need to take the lead in helping schools move beyond the transition compliance requirement. The state of Indiana needs to explore alternative methods of defining programs of secondary transition. One study indicates a five-year study follow-up approach would highlight significant information needed for successful transition programming. Although such an approach may incur financial burdens, it should not be pushed aside. States such as Alabama and Washington have already conducted such studies (Vitellis, 2013). An initiative that holds promise for transition services and programming is Statewide Longitudinal Data Systems (SLDS). This proposal may prove to be an effective method for states to track student outcomes (Alverson et al., 2010).

In addition to the support of the Indiana Department of Education Office of Special Education, local school corporations and communities need to assume responsibility for their SWD. Many SWDs stay in their home communities after leaving post-secondary education. Employment and independent living opportunities need to be available in the community so that SWD can maintain a high quality of life. Collaborative efforts are needed to assist SWD and their families in attaining the necessary connections to agencies that can provide successful post-secondary opportunities.

Transition is a challenge for special education personnel. Special education personnel must provide the concepts of career education/awareness in the curriculum; yet at the same time, the education reform has led to decreasing funds to support such programs and necessary

personnel. Special educators will need to think and act beyond the traditional approaches. Knowledge of the 16 evidenced-based transition predictors is powerful, yet special education personnel need to seek methods to the utilization of the transition predictors. One glaring statistic from this study was that only 64.4% of the respondents indicated they were utilizing paid employment/work experiences for SWD. Now, more than ever, collaboration with the local community needs to transpire in order to forge transition opportunities for SWD. Secondary special education personnel need to seek employment opportunities and experiences for SWD in the local community. Special education personnel cannot be of the mindset to wait for other agencies to provide these services.

The 16 evidenced-based transition predictors provide a framework to provide employment, education, and independent living skills sets for SWD. Respondents in this study indicated they had comprehensive knowledge of the transition predictors and that these predictors have significant positive impact on transition programs and services for SWD. However, there is a practical level of difference on the utilization of those predictors. This study has highlighted those differences. Special education directors need to focus on expanding the pedagogy of transition practices to secondary special education teachers in addition to highlighting the importance of transition programs and services to general education administrators.

### **Limitations**

This study involved surveying special education professionals in the state of Indiana to include: (a) special education directors, (b) assistant directors/program coordinators, and (c) secondary special education teachers. The focus of the survey was to examine the perceptions of each respondent group concerning their knowledge of the 16 evidenced-based transition

predictors, the utilization of the 16 evidenced-base transition predictors, and the perceived effectiveness of the 16 evidenced-based transition predictors and the positive impact on post-school outcomes for SWD.

One limitation could have been the sampling process utilized in the selection of special education directors. Since this study is considered exploratory, the researcher did not systematically choose directors by the organizational pattern of special education directors. The special education directors in the state of Indiana are organized into regional configurations referred to as roundtables. The state of Indiana has seven special education roundtables. The sampling pattern used for this study was a statewide random sampling of all special education directors collectively. Since this study did not systematically sample from the seven roundtables, the study may not be representative of all regions of the state; but it does allow for generalization throughout the state of Indiana based on more broadly defined statewide patterns with generalization of the findings. The potential limitation is that not all seven roundtables may be represented equally based on the decision-making and design.

A second limitation could have been the sample size of the special education directors. However, the assessment of special education directors and their corresponding assistant directors/program coordinators was important as they set the tone and focus for instructional practices within their corporation/cooperative. The perceptions of special education administrators should be considered exploratory. The administrators who participated could have a stronger commitment to transition services and therefore might have had a greater desire to complete the survey. Overall, there was a smaller pool of surveys sent to special education directors than to secondary special education directors. Although the analyses of administrator

perceptions cannot project beyond the participants of this study, their responses provide valuable insight into the perceptions of special education directors.

A third limitation could have been the size of the respondent groups. The sample size was relatively small compare to the total number in the state of Indiana for each group. A sample was taken from special education directors. Based on responses by the directors, the assistant directors/program coordinators were automatically put into the survey pool. The school corporations and schools that the director served were also put into the pool. However, in order to survey the secondary special education teachers, permission had to be granted from the superintendent. If the superintendent said yes, then the high school principals also had to grant permission. The sampling was predicated on several if, then conditions. This could have limited the number of secondary special education teachers.

A fourth limitation could have been technology. The on-line survey tool BSU Qualtrics was utilized for the survey distribution and data collection. Survey links do not always properly work, schools have security measures to limit e-mails, and the respondents need to have a general familiarity with technology in order to access the survey. The respondent must be able to open the link to the survey, answer, and submit data electronically. Respondents unfamiliar with electronic surveys may have had difficulty opening the link or the link may not have worked. Furthermore, schools have spam filters that could have blocked the survey. An eight-week collection period with reminders was utilized to offset this situation. Moreover, BSU Qualtrics allows the researchers to see what e-mails failed or bounced back, allowing the researcher to attempt to correct the problem.

A final limitation is survey questions were designed to give a Likert scale rating or “Do Not Know” response choice. The “Do Not Know” choice may have presented a limitation based on respondents’ perception of the question and their ability to provide an accurate answer.

### **Implications for Practice**

In order to improve transition services for SWD, special education administrators will need to commit to properly educating secondary special education personnel in authentic transition programs and services. This is not an easy task with the current budget restraints faced by public schools. However, this can happen with administrators designing workshops to implement the 16 evidenced-based transition predictors. One study has outlined three recommendations to assist with future practice. The first recommendation is to develop policy and advocacy practices, which should explicitly align with current secondary education reform efforts. The high school experience should adequately prepare SWD for the post-secondary world. This includes aligning curricula, graduation standards, and assessments. This would include holding schools accountable for the workforce. The second recommendation is that transition practioners must engage with secondary educators. The responsibility for transition programming is not exclusively the domain of secondary special education personnel. It involves efforts from general education teachers, counselors, and administrators. The final recommendation is for educators to work closely with families and students to ensure that they have a voice. The transition IEP conference should be student-centered. The student should be a critical partner. Furthermore, family engagement is necessary for community organizations in addition to schools (Morningstar, Bassett, Kochhar-Bryant, Cashman, & Wehmeyer, 2012).

IDEA (2004) mandated that teachers be highly qualified and required that transition outcomes be a focus of the IEPs of student with disabilities IEP. The intent of the law is

practical, yet it had unintended consequences. It asked teachers and schools to perform duties they were not ready to implement. Teachers did not necessarily possess the skills to assist with transition programs and services (Blalock et al., 2003; Li et al., 2009; Morningstar & Benitez, 2013). This begs the question--if students are not working with staff that possess the current needed skill set, how can the 16 evidenced-based predictors be utilized effectively? Direct professional development is needed to assist secondary special education personnel with knowing how to effectively utilize transition predictors. Quality transition services and programs can be implemented when secondary special educators are informed and know how to plan, implement, and utilize the transition predictors with effectiveness.

This study provided insight that eight (8) evidenced-based transition predictors were not being utilized to the maximum extent to support SWD in the state of Indiana (Table 6). These predictors are (a) community awareness, (b) inter-agency collaboration, (c) paid employment/work experiences, (d) active parental involvement, (e) programs of study, (f) social skills, (g) strong transition practices, and (h) work-study programs. This implies secondary special education personnel may be overlooking important opportunities to improve post-school outcomes for SWD. Secondary schools need to objectively examine their current transition services and supports for SWD. Schools need to identify the supports and practices that are utilized in addition to those that are not utilized. By identifying the specific predictors that are and are not being utilized respondent groups can determine areas where professional development is needed. Furthermore, by capitalizing on the practices that are being utilized, secondary special education personnel can focus on ensuring that all of the 16 evidenced-based transition predictors are being utilized, thus building stronger transition practices for SWD.



Targeted professional development is needed to provide teachers with successful strategies for implementation of evidenced-based transition practices. Morningstar and Kleinhammer-Tramill (2005) provided five (5) areas for transition professional development. The first was to train transition personnel in the basic concepts of transition service. This included having knowledge of the requirements of IDEA (2004) in addition to best practices. Also, embedded in this concept was to train personnel in the transition planning of the IEP. Second, transition personnel needed to have knowledge of the models of transition education. This included knowledge of student-focused planning, family involvement, and inter-agency collaboration. Third, personnel needed knowledge of strategies for developing and organizing transition programs and services for SWD. The fourth area for professional development was to have competency in collaboration. This skill was imperative for transition personnel as they work with a variety of agencies and programs for SWD. The fifth area was to have adequate knowledge to address systemic problems in transition programs and services. Developing the capacity to understand and address barriers is vital for implementing and promoting transition services and programs for SWD. While recognizing that professional development can take many forms, what is most important is that the content of the training focused on evidenced-based practices (Morningstar & Kleinhammer-Tramill, 2005).

As stated above, professional development can look different for different corporations/cooperatives. Morningstar and Kleinhammer-Tramill (2005) also provided examples of different professional development strategies. These included: (a) to researching pre-service grant opportunities, (b) participating in non-instructor led online training modules, (c) participating instructor-led online courses, and (d) examining Communities of Practice: Pennsylvania Secondary Transition Initiative (Morningstar & Kleinhammer-Tramill, 2005).

While the focus of this study was on assessing the perceptions of knowledge, usage, and effectiveness of the 16 evidenced-based predictors, the focus of IDEA (2004) is to tie the student's course of study to transition services in addition to focusing on post-school desires. The 16 evidenced-based transition predictors have been scientifically validated through research (Test et al., 2009b). This study contributes to a growing research base that the knowledge, usage and effectiveness of the 16 predictors impacts post-school outcomes for students with disabilities. Understanding that this was just an initial study into the perceptions of the knowledge, usage and effectiveness of these predictors statewide, it may be important to conduct a more comprehensive study initiated by the Indiana Department of Education (IDOE) or the Indiana Secondary Transition Resource Center (ISTRC). The study could further investigate the perceptions of all special education directors, assistant directors/program coordinators, and secondary special education teachers. This study could be conducted via a survey disseminated by the IDOE in conjunction with the Indiana Secondary Transition Resource Center. A longitudinal study, similar to the NLTS2, could be put in place to follow a cohort of students from throughout the state to see how they progress through school with the utilization of the predictors. Implications of this study resulted in the development of recommendations for possible future actions regarding transition services and programs.

Assistance from Indiana Special Education Roundtables could be employed to review significant findings. In addition, Indiana has seven transition cadres representing each roundtable. Findings could further be analyzed and implementation strategies could be developed to assist secondary special education teachers with transition services. Collaboration among corporations/cooperatives within a cadre could develop training for teachers as well.

### **Recommendations**

1. Students with disabilities need to be prepared to begin life after high school (IDEA, 2004). This includes being ready for post-secondary education, employment, and independent living. A more directive approach is required from administrative personnel to ensure development and implementation of a process for transition services and programs that goes further than compliance with Indicator 14. Moreover, providing professional development and training for secondary special education teachers regarding effective utilization of the 16 evidenced-based transition predictors is needed. This training would foster not only the utilization, but also the knowledge and effectiveness of the 16 evidenced-based transition predictors.
2. The Indiana Department of Education Office of Special Education, in collaboration with the seven special education roundtables, should develop a survey to investigate the perceptions of all special education directors, assistant directors/program coordinators, and secondary special education teachers regarding their knowledge, use, and perceived effectiveness of the 16 evidenced-based transition predictors. One benefit of this is the survey could be disseminated to all special education personnel including those who did not participate in this researcher's survey.
3. The Indiana Department of Education Office of Special Education and the seven special education roundtables should create a cohort of students with disabilities to be longitudinally studied regarding their transition services in secondary education and the utilization of the 16 evidenced-based transition predictors.
4. The developed surveys should be disseminated to all public schools serving students with disabilities in order to increase participation. The more participation, the better data the state would have to determine strengths and needs. Therefore, mandatory participation could be

required. By requiring full participation, the state of Indiana would have better data to determine the strengths and the needs of transition programming and services for SWD.

5. Prior to the recent administrative changes at The Indiana Department of Education Office of Special Education comprehensive reports were created and provided roundtable specific data to be discussed at the roundtable level. Monies from The Indiana Department of Education Office of Special Education should be allocated to provide this information. One additional step should be that these reports would then be delivered and discussed with the seven transition cadres. All reports would be placed on the IDOE website for public access. The Indiana Department of Education Office of Special Education needs to re-incorporate this past practice into current transition data collection practices.

6. Annual assessments should be conducted by The Indiana Department of Education Office of Special Education concerning the transition process and the use of the 16 evidenced-based predictors. Specific questions would address the 16 evidenced-based practices and their utilization.

7. Professional development sessions should be created for corporations and schools to use regarding the needed curricular materials, resources, and appropriately trained staff to better serve students with disabilities in the process of transition.

8. The Indiana Secondary Transition Resource Center should be involved in providing assessments for school corporations evaluating the utilization of transition predictors in their secondary transition programs. Furthermore, the resource center should be utilized to provide professional development opportunities for local school corporations.

9. Recommendations for future research should incorporate (a) more comprehensive analysis of “Do Not Know” and “No” which represents do not use, (b) examination of academic

requirements and emphasis on End of Course Assessment (ECA) versus the transition IEP goals and objectives leading to post-school outcomes, and (c) while this study has investigated perceptions of school personnel concerning transition process and predictors it would be important to include student and parent perception.

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## Appendix A

CITI Training

### CITI Collaborative Institutional Training Initiative

#### Social & Behavioral Research - Basic/Refresher Curriculum Completion Report

Printed on 3/31/2013

**Learner:** Nikki Sprunger (username: nssprunger78)

**Institution:** Ball State University

**Contact Information**      68221 CR 31  
    Goshen, IN 46526 United States  
    Department: SPCED  
    Phone: 5745353280  
    Email: nsbussberg@bsu.edu

**Social & Behavioral Research - Basic/Refresher:** Choose this group to satisfy CITI training requirements for Investigators and staff involved primarily in Social/Behavioral Research with human subjects.

#### Stage 1. Basic Course Passed on 08/25/12 (Ref # 8537379)

Required Modules	Date Completed	Score
Belmont Report and CITI Course Introduction	08/24/12	3/3 (100%)
Students in Research	08/24/12	7/10 (70%)
History and Ethical Principles – SBR	08/24/12	5/5 (100%)
Defining Research with Human Subjects – SBR	08/24/12	5/5 (100%)
The Regulations and The Social and Behavioral Sciences - SBR	08/24/12	4/5 (80%)
Assessing Risk in Social and Behavioral Sciences - SBR	08/24/12	5/5 (100%)
Informed Consent – SBR	08/24/12	5/5 (100%)
Privacy and Confidentiality – SBR	08/24/12	5/5 (100%)
Research with Prisoners – SBR	08/24/12	4/4 (100%)
Research with Children – SBR	08/25/12	3/4 (75%)
Research in Public Elementary and Secondary Schools - SBR	08/25/12	3/4 (75%)
International Research – SBR	08/25/12	3/3 (100%)
Internet Research – SBR	08/25/12	4/5 (80%)
Research and HIPAA Privacy Protections	08/25/12	3/5 (60%)

Vulnerable Subjects - Research Involving Workers/Employees	08/25/12	4/4 (100%)
Conflicts of Interest in Research Involving Human Subjects	08/25/12	4/5 (80%)
Unanticipated Problems and Reporting Requirements in Social and Behavioral Research	08/25/12	3/3 (100%)
Ball State University	08/25/12	no quiz

**For this Completion Report to be valid, the learner listed above must be affiliated with a CITI participating institution. Falsified information and unauthorized use of the CITI course site is unethical, and may be considered scientific misconduct by your institution.**

Paul Braunschweiger Ph.D.  
 Professor, University of Miami  
 Director Office of Research Education  
 CITI Course Coordinator

## Appendix B

### IRB Approval



#### Institutional Review Board

DATE: June 27, 2013  
 TO: Nikki Sprunger  
 FROM: Ball State University IRB  
 RE: IRB protocol # 481019-1  
 TITLE: Special Education Transition Predictors Used in Indiana for Secondary  
 Special Education Students; Perceptions from the Field  
 SUBMISSION TYPE: New Project  
 ACTION: DETERMINATION OF EXEMPT STATUS  
 DECISION DATE: June 27, 2013

---

The Institutional Review Board reviewed your protocol on June 27, 2013 and has determined the procedures you have proposed are appropriate for exemption under the federal regulations. As such, there will be no further review of your protocol, and you are cleared to proceed with the procedures outlined in your protocol. As an exempt study, there is no requirement for continuing review. Your protocol will remain on file with the IRB as a matter of record.

#### Editorial notes:

##### 1. EXEMPT

While your project does not require continuing review, it is the responsibility of the P.I. (and, if applicable, faculty supervisor) to inform the IRB if the procedures presented in this protocol are to be modified or if problems related to human research participants arise in connection with this project. **Any procedural modifications must be evaluated by the IRB before being implemented, as some modifications may change the review status of this project.** Please contact please contact Jennifer Weaver at 765-285-5034 or [jmweaver@bsu.edu](mailto:jmweaver@bsu.edu) if you are unsure whether your proposed modification requires review or have any questions. Proposed modifications should be addressed in writing and submitted electronically to the IRB (<http://www.bsu.edu/irb>) for review. Please reference the above IRB protocol number in any communication to the IRB regarding this project.

**Reminder:** Even though your study is exempt from the relevant federal regulations of the Common Rule (45 CFR 46, subpart A), you and your research team are not exempt from ethical research practices and should therefore employ all protections for your participants and their data which are appropriate to your project.





Office of Research Integrity  
 Institutional Review Board (IRB)  
 2000 University Avenue  
 Muncie, IN 47306-0155  
 Phone: 765-285-5070

---

DATE: November 4, 2013

TO: Nikki Sprunger

FROM: Ball State University IRB

RE: IRB protocol # 481019-2

TITLE: Special Education Transition Predictors Used in Indiana for Secondary  
 Special Education Students: Perceptions from the Field

SUBMISSION TYPE: Amendment/Modification

ACTION: APPROVED

DECISION DATE: November 4, 2013

REVIEW TYPE: **EXEMPT**

---

The Institutional Review Board reviewed your protocol on November 4, 2013 and has determined the procedures you have proposed are appropriate for exemption under the federal regulations. As such, there will be no further review of your protocol, and you are cleared to proceed with the procedures outlined in your protocol. As an exempt study, there is no requirement for continuing review. Your protocol will remain on file with the IRB as a matter of record.

**Exempt Categories:**

	<b>Category 1:</b> Research conducted in established or commonly accepted educational settings, involving normal educational practices, such as (i) research on regular and special education instructional strategies, or (ii) research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.
	<b>Category 2:</b> Research involving the use of educational test (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior
	<b>Category 3:</b> Research involving the use of educational test (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior that is not exempt under category 2, if: (i) the human subjects are elected or appointed officials or candidates for public office; or (ii) Federal statute(s) require(s) without exception that the confidentiality of the personally identifiable information will be maintained throughout the research and thereafter.
	<b>Category 4:</b> Research involving the collection of study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available or

	if the information is recorded by the investigator in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects.
	<b>Category 5:</b> Research and demonstration projects which are conducted by or subject to the approval of Department or agency heads, and which are designed to study, evaluate or otherwise examine: (i) public benefit or service programs; (ii) procedures for obtaining benefits or services under those programs; (iii) possible changes in methods or levels of payment for benefits or services under these programs.
	<b>Category 6:</b> Taste and food quality evaluation and consumer acceptance studies, (i) if wholesome foods without additives are consumed or (ii) if a food is consumed which contains a food ingredient at or below the level and for a use found to be safe, by the Food and Drug Administration or approved by the Environmental Protection Agency or the Food Safety and Inspection Service of the U.S. Department of Agriculture.

#### Editorial Notes:

##### 1. Modification Approved

While your project does not require continuing review, it is the responsibility of the P.I. (and, if applicable, faculty supervisor) to inform the IRB if the procedures presented in this protocol are to be modified or if problems related to human research participants arise in connection with this project. **Any procedural modifications must be evaluated by the IRB before being implemented, as some modifications may change the review status of this project.** Please contact (ORI Staff) if you are unsure whether your proposed modification requires review or have any questions. Proposed modifications should be addressed in writing and submitted electronically to the IRB (<http://www.bsu.edu/irb>) for review. Please reference the above IRB protocol number in any communication to the IRB regarding this project.

**Reminder:** Even though your study is exempt from the relevant federal regulations of the Common Rule (45 CFR 46, subpart A), you and your research team are not exempt from ethical research practices and should therefore employ all protections for your participants and their data which are appropriate to your project.

Bryan Byers, PhD/Chair  
Institutional Review Board

Christopher Mangelli, JD, MS, MEd, CIP/Director  
Office of Research Integrity

## *Appendix C*

### Director Permission

Mr., Mrs., Ms., Dr., ‘Director of Special Education last name’

My name is Nikki Sprunger and I am a doctoral candidate in the Department of Special Education at Ball State University. I am working on my dissertation as a part of my doctoral program. The title of my dissertation study is “Special Education Transition Predictors Used in Indiana for Secondary Special Education Students: Perceptions from the Field.”

Best practice in transition services has been a focus within the field of special education with the inception of the Education for all Handicapped Children Act (EHA) Amendments 1986 (Cobb & Alwell, 2009). The purpose of this study is to investigate the perceptions of special education directors, program coordinators and secondary special education teachers concerning the current knowledge, usage effectiveness of evidenced-based transition predictors at the high school level in the State of Indiana.

I am writing to ask your permission to have you, your assistant directors/program coordinators and high school special education teachers participate in this study. I would like to send this survey to you, your assistant directors/program coordinators and high school special education teachers. For this study, you and the above mentioned staff will be asked to participate in an on-line survey conducted through Ball State University’s Qualtrics software. Questions included in the survey will be related to demographic information, the knowledge, use and effectiveness of the 16 evidenced-based transition predictors and open-ended response questions. Participation in this study is voluntary and the survey will take approximately 15 minutes to complete.

If you agree to participate and have your assistant directors/program coordinators and high school special education teachers participate in this study, please sign and return the attached consent form for participation. You may return this form by: a) scanned email attachment, b) fax to Ball State University (765-285-4280) attention: Nikki Sprunger c/o Dr. Harvey or c) U.S. mail (at the address below). The anticipated timeline to conduct this study will be October 1, 2013 to November 30, 2013. If you have any questions concerning the study, please feel free to contact me and I will be happy to discuss any questions with you. In addition, if I am able to obtain your permission for \_\_\_\_\_ cooperative to participate in this study, please let the school’s superintendent know that you have provided permission for study participation.

I would greatly appreciate your consideration of this request and would be excited to include your schools and teachers in this meaningful research study. After completion of this study, I would be happy to share the results with you.

Thank you in advance for taking time to assist me in this research project.

Sincerely,  
Nikki Sprunger  
Researcher Contact Information  
Primary Investigator  
Nikki Sprunger

Doctoral Candidate  
 Department of Special Education  
 Ball State University  
 nsbussberg@bsu.edu

Faculty Advisor  
 Dr. Michael Harvey  
 Associate Professor  
 2000 W. University Ave.  
 Muncie, IN 47306  
 Ball State University  
 Department of Special Education (TC 712)  
 Ball State University  
[mwharvey@bsu.edu](mailto:mwharvey@bsu.edu)  
 765-285-5715

***Indiana Evidenced-based Transition Survey***

Title: Special Education Transition Predictors Used in Indiana for Secondary Special Education

Students: Perceptions from the Field.

Survey URL link to BSU Qualtrics:

Projected Timeline for Study:

Study implemented/initiated:	Beginning of October 2013
Study with 3 follow-up 2 week intervals:	October and November 2013
Study survey completed:	November 30, 2013
Study data analysis:	December 2013 –February 2014
Results reported:	April-May 2014

Thank you for your consideration of this research.

Note: The following is a suggested template for Permission Signature Form Cooperative Consent to Participate included below. This permission form needs to be printed on school corporation/special education cooperative letterhead for purposes of documentation for the research study and sent to the researcher at the contact information of above.

**\*School Corporation/Special Education Cooperative Letterhead**

**Permission Signature Form School Consent to Participate**

**Study Title:** Special Education Transition Predictors Used in Indiana for Secondary Special Education Students: Perceptions from the Field.

**Consent for secondary school participation in this research study:**

I, \_\_\_\_\_, agree to provide permission to participate in this research project entitled, "Special Education Transition Predictors Used in Indiana for Secondary Special Education Students: Perceptions from the Field. I have had the study explained to me and as the special education administrator I give consent to have my school/cooperative personnel included in this research project. I have read the description of this project and give my consent to participate. I understand that this signed consent form will be kept on file by the researcher for study participation.

\_\_\_\_\_  
Director of Special Education Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Special Education Cooperative/School Corporation

**Researcher Contact Information**

Primary Investigator  
Nikki Sprunger  
Doctoral Candidate  
Department of Special Education  
Ball State University  
nsbussberg@bsu.edu  
574-535-3280  
765-285-4280 (Fax)

Faculty Advisor  
Dr. Michael Harvey  
Associate Professor  
Department of Special Education  
Ball State University  
mwharvey@bsu.edu  
765-285-5715

## *Appendix D*

### Superintendent Permission

Mr., Mrs., Ms., Dr., ‘Superintendent’s last name’

My name is Nikki Sprunger and I am a doctoral candidate in the Department of Special Education at Ball State University. I am working on my dissertation as a part of my doctoral program. The title of my dissertation study is: Special Education Transition Predictors Used in Indiana for Secondary Special Education Students: Perceptions from the Field.

Best practice in transition services has been a focus within the field of special education with the inception of the Education for all Handicapped Children Act (EHA) Amendments 1986 (Cobb & Alwell, 2009). The purpose of this study is to investigate the perceptions of special education directors, program coordinators and secondary special education teachers concerning the current usage of evidenced-based transition predictors at the high school level in the State of Indiana.

I am writing to ask your permission to have your high school(s) participate in this study. I would like to send this survey to your secondary schools’ special education teachers. For this study, your secondary teachers will be asked to participate in an on-line survey conducted through Ball State University’s Qualtrics software. Questions included in the survey will be related to demographic information, use and effectiveness, of the 16 evidenced-based transition predictors and open-ended response questions. Participation in this study is voluntary and the survey will take approximately 15 minutes to complete.

If you agree to have your high school(s) participate in this study, please sign and return the attached consent form for participation. You may return this form by: a) scanned email attachment, b) fax to Ball State University (765-285-4280) attention: Nikki Sprunger c/o Dr. Harvey or c) U.S. mail (at the address below). The anticipated timeline to conduct this study will be October 1, 2013 to November 30, 2013. If you have any questions concerning the study, please feel free to contact me and I will be happy to discuss any questions with you. In addition, if I am able to obtain your permission for \_\_\_\_\_ school(s) to participate in this study, please let the high school’s principal know that you have provided permission for study participation.

I would greatly appreciate your consideration of this request and would be excited to include your school and teachers in this meaningful research study. After completion of this study, I would be happy to share the results with you.

Thank you in advance for taking time to assist me in this research project.

Sincerely,

Nikki Sprunger

Researcher Contact Information

Primary Investigator

Nikki Sprunger

Doctoral Candidate

Department of Special Education

Ball State University  
 nsbussberg@bsu.edu

Faculty Advisor  
 Dr. Michael Harvey  
 Associate Professor  
 2000 W. University Ave.  
 Muncie, IN 47306  
 Ball State University  
 Department of Special Education (TC 712)  
 Ball State University  
[mwharvey@bsu.edu](mailto:mwharvey@bsu.edu)  
 765-285-5715

***Indiana Evidenced-based Transition Survey***

Title: Special Education Transition Predictors Used in Indiana for Secondary Special Education

Students: Perceptions from the Field.

Survey URL link to BSU Qualtrics:

Qualtrics web Link Here

Projected Timeline for Study:

Study implemented/initiated:	Beginning of October 2013
Study with 3 follow-up 2 week intervals:	October and November 2013
Study survey completed:	November 30, 2013
Study data analysis:	December 2013 –February 2014
Results reported:	April-May 2014

Thank you for your consideration of this research.

Note: The following is a suggested template for Permission Signature Form School Consent to Participate included below. This permission form needs to be printed on school corporation letterhead for purposes of documentation for the research study and sent to the researcher at the contact information of above.

**\*School Corporation Letterhead**

**Permission Signature Form School Consent to Participate**

**Study Title:** Special Education Transition Predictors Used in Indiana for Secondary Special Education Students: Perceptions from the Field.

**Consent for secondary school participation in this research study:**

I, \_\_\_\_\_, agree to provide permission to participate in this research project entitled, “Special Education Transition Predictors Used in Indiana for Secondary Special Education Students: Perceptions from the Field” I have had the study explained to me and as the superintendent I give consent to have my high school special education teachers included in this research project. I have read the description of this project and give my consent to participate. I understand that this signed consent form will be kept on file by the researcher for study participation.

\_\_\_\_\_  
Superintendent’s Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
School Corporation

\_\_\_\_\_  
Secondary School

**Research Contact Information**

Primary Investigator  
Nikki Sprunger  
Nikki Sprunger  
Doctoral Candidate  
Department of Special Education  
Ball State University  
nsbussberg@bsu.edu  
765-285-4280 (Fax)

Faculty Advisor  
Dr. Michael Harvey  
Associate Professor  
Department of Special Education  
Ball State University  
mwharvey@bsu.edu  
765-285-5715



## *Appendix E*

### Principal Permission

Mr., Mrs., Ms., Dr., ‘Principal’s last name’

My name is Nikki Sprunger and I am a doctoral candidate in the Department of Special Education at Ball State University. I am working on my dissertation as a part of my doctoral program. The title of my dissertation study is: Special Education Transition Predictors Used in Indiana for Secondary Special Education Students: Perceptions from the Field.

Best practice in transition services has been a focus within the field of special education with the inception of the Education for all Handicapped Children Act (EHA) Amendments 1986 (Cobb & Alwell, 2009). The purpose of this study is to investigate the perceptions of special education directors, program coordinators and secondary special education teachers concerning the current usage of evidenced-based transition predictors at the high school level in the State of Indiana. I am writing to ask your permission to have your special education teachers participate in this study. I would like to send this survey to your school’s secondary special education teachers. For this study, your teachers will be asked to participate in an on-line survey conducted through Ball State University’s Qualtrics software. Questions included in the survey will be related to demographic information, use and effectiveness, of the 16 evidenced-based transition predictors and open-ended response questions. Participation in this study is voluntary and the survey will take approximately 15 minutes to complete.

I have been given consent by the director of special education and school superintendent to have your school’s special education teachers participate in this study. If you agree to have your school’s special education teachers participate in this study, please sign and return the attached consent form for participation. You may return this form by: a) scanned email attachment, b) fax to Ball State University (765-285-4280) attention: Nikki Sprunger c/o Dr. Harvey or c) U.S. mail (at the address below). The anticipated timeline to conduct this study will be October 1, 2013 through November 30, 2013. If you have any questions concerning the study, please feel free to contact me and I will be happy to discuss any questions with you. In addition, if I am able to obtain your permission for \_\_\_\_\_ school to participate in this study, please let the school’s principal know that you have provided permission for study participation.

I would greatly appreciate your consideration of this request and would be excited to include your school and teachers in this meaningful research study. After completion of this study, I would be happy to share the results with you.

Thank you in advance for taking time to assist me in this research project.

Sincerely,  
Nikki Sprunger

#### Researcher Contact Information

Primary Investigator  
Nikki Sprunger  
Doctoral Candidate

Department of Special Education  
 Ball State University  
[nsbussberg@bsu.edu](mailto:nsbussberg@bsu.edu)

Faculty Advisor  
 Dr. Michael Harvey  
 Associate Professor  
 2000 W. University Ave.  
 Muncie, IN 47306  
 Ball State University  
 Department of Special Education (TC 712)  
 Ball State University  
[mwharvey@bsu.edu](mailto:mwharvey@bsu.edu)  
 765-285-5715

***Indiana Evidenced-based Transition Survey***

Title: Special Education Transition Predictors Used in Indiana for Secondary Special Education  
 Students: Perceptions from the Field.  
 Survey URL link to BSU Qualtrics:  
[Qualtrics web Link Here](#)

Projected Timeline for Study:

Study implemented/initiated:	Beginning of October 2013
Study with 3 follow-up 2 week intervals:	October and November 2013
Study survey completed:	November 30, 2013
Study data analysis:	December 2013 –February 2014
Results reported:	April-May 2014

Thank you for your consideration of this research.

Note: The following is a suggested template for Permission Signature Form School Consent to Participate included below. This permission form needs to be printed on school corporation letterhead for purposes of documentation for the research study and sent to the researcher at the contact information of above.

**\*School Corporation Letterhead**

**Permission Signature Form School Consent to Participate**

**Study Title:** Special Education Transition Predictors Used in Indiana for Secondary Special Education Students: Perceptions from the Field.

**Consent for secondary school participation in this research study:**

I, \_\_\_\_\_, agree to provide permission to participate in this research project entitled, “Special Education Transition Predictors Used in Indiana for Secondary Special Education Students: Perceptions from the Field” I have had the study explained to me and as the school administrator I give consent to have my school’s special education teachers included in this research project. I have read the description of this project and give my consent to participate. I understand that this signed consent form will be kept on file by the researcher for study participation.

\_\_\_\_\_  
Principal’s Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Secondary School

\_\_\_\_\_  
School Corporation

**Research Contact Information**

Primary Investigator  
Nikki Sprunger  
Nikki Sprunger  
Doctoral Candidate  
Department of Special Education  
Ball State University  
nsbussberg@bsu.edu  
765-285-4280 (Fax)

Faculty Advisor  
Dr. Michael Harvey  
Associate Professor  
Department of Special Education  
Ball State University  
[mwharvey@bsu.edu](mailto:mwharvey@bsu.edu)  
765-285-5715

## *Appendix F*

### Participant E-Mail

Dear “Participant’s Name”,

My name is Nikki Sprunger and I am writing to ask for your assistance. I am conducting a research study as part of my doctoral work at Ball State University. The study is titled “Special Education Transition Predictors Used in Indiana for Secondary Special Education Students: Perceptions from the Field.” The purpose of this study is to investigate the perceptions of special education directors, program coordinators and secondary special education teachers concerning the current knowledge, usage effectiveness of evidenced-based transition predictors at the high school level in the State of Indiana.

You are being asked to participate in this survey based on your work with students with disabilities in secondary education. For this study, you will be asked to participate in an on-line survey conducted through Ball State University’s Qualtrics software. Questions included in the survey will be related to demographic information, the knowledge, use and effectiveness of the 16 evidenced-based transition predictors and open-ended response questions. Participation in this study is voluntary and the survey will take approximately 15 minutes to complete. You may also withdraw from participation at any time. Please take time to read the complete informed consent statement that will appear after you click on the link below to access the survey.

Thank you for taking time to assist me in this research project.

Sincerely,

Nikki Sprunger  
Researcher Contact Information  
 Primary Investigator  
 Nikki Sprunger  
 Doctoral Candidate  
 Department of Special Education  
 Ball State University  
 nsbussberg@bsu.edu

Faculty Advisor  
 Dr. Michael Harvey  
 Associate Professor  
 2000 W. University Ave.  
 Muncie, IN 47306  
 Ball State University  
 Department of Special Education (TC 712)  
 mwharvey@bsu.edu  
 765-285-5715

**Survey Link**

## *Appendix G*

### Survey

#### Study Title:

Special Education Transition Predictors Used in Indiana for Secondary Special Education Students: Perceptions from the Field

#### Study Purpose:

This questionnaire is designed to obtain information from special education directors, assistant directors/program coordinators, and high school special education teachers in Indiana public schools. The purpose of the study is to explore the knowledge, use, effectiveness and impact of post-school outcomes of 16 evidenced-based transition predictors. This study will provide important data that sheds light on the transition predictors and best-practice being used in Indiana's secondary settings to improve the post-school outcomes for students with disabilities. In addition, the study will investigate participant's perceptions of barriers to implementation of paid employment/work experiences, inclusion in the general education setting, self-care/independent living skills, self-determination and parental involvement related to secondary transition program and services.

#### Inclusion Criteria:

To participate in this survey you must have an IDOE administrator and/or teacher license, be 18 years or older, and have responsibilities related to secondary transition, and work in a special education cooperative or school corporation in Indiana

#### Participation Procedures and Duration:

For this study, you will be asked to complete an on-line survey regarding the current knowledge, usage, effectiveness and impact on post-school outcomes of 16 evidence-based transition predictors and the barriers of implementing paid employment/work experiences, inclusion in the general education, self-care/independent living skills, and parental involvement. The survey will take approximately 10-15 minutes to complete.

#### Data Confidentiality:

All data will be stored as confidential and no individual identifying information will be presented in any publication or presentation related to the study. The individual survey link will be coded to assist with survey distribution and follow-up as a part of the data collection procedures.

#### Storage of Data:

All data from the survey will be saved electronically in Ball State University Qualtrics survey software under the researcher's account and files. The data will be protected by using a password. The researcher and the faculty advisor are the only individuals who can access the data. All data will be kept for the duration of the study and will be deleted within two years of the end of the study period. The data will be on Ball State University Qualtrics server and on the researcher's computer. All files and computers are password protected.

#### Risks:

There are no predictable risks involved in this study. You may choose to not answer any question that makes you uncomfortable and you may stop the survey at any time.

#### Benefits:

This study will provide important data that sheds light on the transition predictors and best-practice being used in Indiana's secondary settings to improve the post-school outcomes for students with disabilities. In addition, the study will investigate participant's perceptions of barriers to implementation of paid employment/work experiences, inclusion in the general education setting, self-care/independent living skills, self-determination and parental involvement related to secondary transition program and services.

Researcher Contact Information:

Primary Investigator  
Nikki Sprunger  
Doctoral Candidate  
Department of Special Education  
Ball State University  
nsbussberg@bsu.edu

Faculty Advisor  
Dr. Michael Harvey  
Associate Professor  
Department of Special Education  
Ball State University  
mwharvey@bsu.edu 765-285-5715

IRB Contact Information: For one's rights as a research subject, you may contact the following:  
Director, Office of Research Integrity, Ball State University, Muncie, IN 47306 (765) 285-5070 or irb@bsu.edu

INFORMED CONSENT

- ☐ I agree (1)
- ☐ I declined (2)

Section I: About this Study

Best practice in transition services has been a focus within the field of special education with the inception of the Education for all Handicapped Children Act (EHA) Amendments 1986 (Cobb & Alwell, 2009). As a result, developing and implementing transitions programs that lead to successful post-school outcomes for students with disabilities has become both a goal and a challenge for secondary special education teachers. Research from Test et al. (2009) provides a framework from the literature of 16 evidenced-based secondary transition predictors and post-school outcomes. State and local agencies continually strive to improve performance as demonstrated in Indicator 13 (post-school goals and transition IEP) and Indicator 14 (post-school outcomes). These 16 predictors provide insight that can be used to develop and augment transition programs in addition to improving secondary transition programs in the State of Indiana.

Section II: Demographics Please provide the following background information about yourself and your current position by selecting the item in each question that best describes you/your position.

1. What is your gender?

- ☐ A. Male (1)
- ☐ B. Female (2)

2. What is your current age?

- ☐ A. 20-25 (1)
- ☐ B. 26-30 (2)
- ☐ C. 31-40 (3)
- ☐ D. 41-50 (4)
- ☐ E. 51-60 (5)
- ☐ F. 61+ (6)

3. What is your current position?

- ☐ A. Special Education Director (1)
- ☐ B. Special Education Assistant Director/Program Coordinator (2)
- ☐ C. Secondary Special Education Teacher (3)

4. What is the status of your current position setting? (Select the most appropriate descriptor based on your position setting)

- ☐ A. Special Education Cooperative (1)
- ☐ B. LEA/School Corporation (2)
- ☐ C. High school (grades 9-12) (3)
- ☐ D. Junior-Senior High School (grades 7-12) (4)

5. What best describes your level of educational attainment?

- ☐ A. BA/BS degree (1)
- ☐ B. MA/MS degree (2)
- ☐ C. Educational Specialist degree (3)
- ☐ D. Doctoral Ed.D/Ph.D (4)

6. How long have you been in your current position?

- ☐ A. less than 1 year (1)
- ☐ B. 1-2 years (2)
- ☐ C. 3-5 years (3)
- ☐ D. 6-10 years (4)
- ☐ E. 11-15 years (5)
- ☐ F. 16-20 years (6)
- ☐ G. more than 20 years (7)

7. How long have you been employed at your current corporation/cooperative?

- ☐ A. less than 1 year (1)
- ☐ B. 1-5 years (2)
- ☐ C. 6-10 years (3)
- ☐ D. 11-15 years (4)
- ☐ E. 16-20 years (5)
- ☐ F. More than 20 years (6)

8. How long have you been in the field of education?

- ☐ A. less than 1 year (1)
- ☐ B. 1-5 years (2)
- ☐ C. 6-10 years (3)
- ☐ D. 11-15 years (4)
- ☐ E. 16-20 years (5)
- ☐ F. More than 20 years (6)

9. How would you best describe your corporation/cooperative?

- ☐ A. Urban (1)
- ☐ B. Suburban (2)
- ☐ C. Metropolitan (3)
- ☐ D. Rural (4)

10. How would you best describe the size of your corporation/cooperative?

- ☐ A. Large (10,000+ students) (1)
- ☐ B. Medium-Large (5,000-9,999 students) (2)
- ☐ C. Medium (1,000-4,999) (3)
- ☐ D. Small (less than 1,000 students) (4)

### Section III: Knowledge of Predictors

This section is designed to explore your knowledge related to the 16 evidenced-based transition predictors (Test et. al, 2009). Knowledge of the sixteen transition predictors develops the focus for successful secondary transition programs. Please indicate the degree of agreement you would place on the following study item by selecting the corresponding survey item rating.

Please use this rating scale for all survey questions.

Rating scale: Degree of Agreement with Study Item Statement

- 1=Strongly Disagree with Statement = 0-25% agreement
- 2= Disagree with Statement = 26-50% agreement
- 3= Agree with Statement = 51-75% agreement
- 4= Strongly Agree with Statement = 76-100% agreement
- 5= Do Not Know = No knowledge



## 11. Knowledge of evidenced-based transition predictors.

I have comprehensive knowledge of career awareness education (i.e., Learning opportunities and skills needed in various occupational pathways). (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have comprehensive knowledge of community awareness opportunities (i.e., Learning activities occurring outside of the school setting supported with in-class instruction). (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have comprehensive knowledge of inclusion practices in general education (i.e., Access to general education curriculum for students with disabilities and to be engaged in regular education classes). (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have comprehensive knowledge of inter-agency collaboration (i.e., A clear, purposeful and carefully designed process that promotes cross agency, cross program, and cross disciplinary collaborative efforts leading to tangible transition outcomes for youth). (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

comprehensive knowledge of occupational courses (i.e., Courses that support career awareness, allow students to explore career pathways, develop occupational skills, and experiences that focus on desired employment goals). (5)					
I have comprehensive knowledge of paid employment/work experiences (i.e., Any activity that places the student in an authentic workplace including job shadowing, internships and paid employment). (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have comprehensive knowledge of active parental involvement (i.e., Active parent participation in all aspects of transition planning, attending meetings and providing support). (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have comprehensive knowledge of programs of study related to an academic content area (i.e., Individualized set of courses, experiences, and curriculum designed to develop students' academic and functional achievement to support the	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

attainment of students' desired post-school goals). (8)					
I have comprehensive knowledge of self-advocacy/self-determination skills (i.e., The ability to make choices, solve problems, and set goals). (9)	○	○	○	○	○
I have comprehensive knowledge of self-care/independent living skills (i.e., Skills necessary for management of one's personal self-care and daily independent living). (10)	○	○	○	○	○
I have comprehensive knowledge of social skills (i.e., Behaviors and attitudes that facilitate communication and cooperation. e.g., social conventions, social problem-solving when engaged in a social interaction, body language, speaking, listening, responding, verbal and written communication). (11)	○	○	○	○	○
I have comprehensive knowledge of strong student support in the educational setting (i.e., Network of people who provide services and resources in multiple environments to	○	○	○	○	○

<p>assist students). (12)</p> <p>I have comprehensive knowledge of vocational education ( i.e., A sequence of courses that prepares students for specific job or career at various levels from trade or craft positions to technical, business or professional careers). (13)</p> <p>I have comprehensive knowledge of the elements of a strong transition program (i.e., Individualized opportunities, services and supports to help students achieve post-school goals). (14)</p> <p>I have comprehensive knowledge of work study programs (i.e., A specified sequence of work skills instruction and experiences designed to develop students' work attitudes and general work behaviors with mutually supportive and integrated academic and vocational instruction). (15)</p> <p>I have comprehensive knowledge of the exit exam/high school diploma requirements (i.e., Standardized state tests, assessing single content area with specified levels</p>	○	○	○	○	○
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of proficiency. Diploma status is achieved by completing the requirements of the state awarding the diploma including the completion of necessary core curriculum). (16)					
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Section IV This section is designed to obtain information on the usage of the 16 evidenced-based transition predictors.

Please indicate by answering Yes or No if the transition predictor is used in your school/cooperative and the subsequent questions concerning their effectiveness and impact if currently used.

12. My corporation/cooperative utilizes career awareness education as part of secondary transition program/services.

- ☐ Yes (1)  
☐ No (2)  
☐ Do Not Know (3)

12a. Describe the effectiveness in providing career awareness education opportunities.

Career awareness education is effectively implemented in secondary transition programs offered to students with disabilities in my school/cooperative setting. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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12b. Describe the impact career awareness education has on post-school outcomes.

Career awareness education implemented in secondary transition programming has a positive impact on post-school outcomes for students with disabilities in my school/cooperative setting. (1)	○	○	○	○	○
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13. My corporation/cooperative utilizes community awareness opportunities as part of secondary transition program/services.

- Yes (1)
- No (2)
- Do Not Know (3)

13a. Describe the effectiveness in providing community awareness opportunities.

Community awareness opportunities are effectively implemented in secondary transition programs offered to students with disabilities in my school/cooperative setting. (1)	○	○	○	○	○
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13b. Describe the impact community awareness has on post-school outcomes.

Community awareness education implemented in secondary transition programming has a positive impact on post-school outcomes for students with disabilities in my school/cooperative setting. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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14. My corporation/cooperative utilizes inclusion in general education to the maximum extent possible as part of secondary transition program/services for students with disabilities.

- ☐ Yes (1)  
☐ No (2)  
☐ Do Not Know (3)

14a. Describe the effectiveness in providing inclusion for students with disabilities in general education.

My current corporation/cooperative is effective in providing inclusion in general education for students with disabilities at the secondary level. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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14b. Describe the impact inclusion in general education has on post-school outcomes for students with disabilities.

Inclusion in general education implemented in secondary transition programming has a positive impact on post-school outcomes for students with disabilities in my school/cooperative setting. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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15. My corporation/cooperative utilizes inter-agency collaboration as part of secondary transition program/services.

- ☐ Yes (1)  
☐ No (2)  
☐ Do Not Know (3)

15a. Describe the effectiveness in providing inter-agency collaboration.

Inter-agency collaboration is effectively implemented in secondary transition programs offered to students with disabilities in my school/cooperative setting. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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15b. Describe the impact inter-agency collaboration has on post-school outcomes.

Inter-agency collaboration implemented in secondary transition programming has a positive impact on post-school outcomes for students with disabilities in my school/cooperative setting. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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16. My corporation/cooperative utilizes occupational courses as part of secondary transition program/services for students with disabilities.

- ☐ Yes (1)  
☐ No (2)  
☐ Do Not Know (3)

16a. Describe the effectiveness of providing occupational courses for students with disabilities.

Occupational courses are effectively implemented in secondary transition programs offered to students with disabilities in my school/cooperative setting for students with disabilities. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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16b. Describe the impact occupational courses have on post-school outcomes for students with disabilities.

Occupational courses implemented in secondary transition programming have a positive impact on post-school outcomes for students with disabilities in my school/cooperative setting. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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17. My corporation/cooperative utilizes paid employment/work experiences as part of secondary transition program/services for students with disabilities.

- ☐ Yes (1)  
☐ No (2)  
☐ Do Not Know (3)

17a. Describe the effectiveness of providing paid employment experiences for students with disabilities.

Paid employment work experiences are effectively implemented in secondary transition programs offered to students with disabilities in my school/cooperative setting. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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17b. Describe the impact paid employment experiences have on post-school outcomes for students with disabilities.

Paid employment experiences implemented in secondary transition programming have a positive impact on post-school outcomes for students with disabilities in my school/cooperative setting. (1)	○	○	○	○	○
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18. My corporation/cooperative encourages a high level of parental involvement as part of secondary transition program/services.

- Yes (1)
- No (2)
- Do Not Know (3)

18a. Describe the effectiveness of high levels of parent involvement.

High levels of parental involvement are effective in supporting secondary transition program/services. (1)	○	○	○	○	○
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18b. Describe the impact high levels of parental involvement has on post-school outcomes.

High levels of parental involvement in secondary transition programming have a positive impact on post-school outcomes for students with disabilities in my school/cooperative setting. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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19. My corporation/cooperative utilizes a structured program of study related to an academic or vocational field as part of secondary transition program/services for students with disabilities.

- ☐ Yes (1)  
☐ No (2)  
☐ Do Not Know (3)

19a. A structured program of study related to an academic or vocational field is effectively implemented as part of secondary transition programming offered to students with disabilities.

A structured program of study related to an academic or vocational field is effectively implemented in secondary transition programs offered to students with disabilities in my school/cooperative setting. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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19b. Describe the impact of a structured program of study related to an academic or vocational field has on post-school outcomes.

<p>A structured program of study related to an academic or vocational field implemented in secondary transition programming has a positive impact on post-school outcomes for students with disabilities in my school/cooperative setting. (1)</p>	○	○	○	○	○
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20. My corporation/cooperative teaches self-advocacy/self-determination skills as part of secondary transition program/services for students with disabilities.

- ☐ Yes (1)  
☐ No (2)  
☐ Do Not Know (3)

20a. Self-advocacy/self-determination instruction is effectively implemented as part of secondary transition programming offered to students with disabilities.

<p>Self-advocacy/self-determination instruction is effectively implemented in secondary transition programs offered to students with disabilities in my school/cooperative setting. (1)</p>	○	○	○	○	○
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20b. Self-advocacy/self-determination programming has an impact on post-school outcomes.

Self-advocacy/self-determination skills implemented in secondary transition programming has a positive impact on post-school outcomes for students with disabilities in my school/cooperative setting. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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21. My corporation/cooperative teaches self-care/independent living skills as part of secondary transition program/services for students with disabilities.

- ☐ Yes (1)  
☐ No (2)  
☐ Do Not Know (3)

21a. Describe the effectiveness of teaching self-care/independent living skills.

Self-care/independent living instruction is effectively implemented in secondary transition program services offered to students with disabilities in my school/cooperative setting. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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21b. Describe the impact teaching self-care/independent living skills has on post-school outcomes.

Self-care/independent living skills implemented in secondary transition programming has a positive impact on post-school outcomes for students with disabilities in my school/cooperative setting. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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22. My corporation/cooperative offers specific training on social skills as part of secondary transition program/services for students with disabilities.

- ☐ Yes (1)  
☐ No (2)  
☐ Do Not Know (3)

22a. Describe the effectiveness of specific training on social skills for students with disabilities.

Social skills instruction is effectively implemented in secondary transition programs offered to students with disabilities in my school/cooperative setting. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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22b. Describe the impact specific training on social skills has on post-school outcomes.

Social skills implemented in secondary transition programming have a positive impact on post-school outcomes for students with disabilities in my school/cooperative setting. (1)	○	○	○	○	○
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23. My corporation/cooperative utilizes strong student support as part of secondary transition program/services.

- Yes (1)
- No (2)
- Do Not Know (3)

23a. Describe the effectiveness of offering strong student support for students with disabilities.

Strong student support is effectively implemented in secondary transition programs offered to students with disabilities in my school/cooperative setting. (1)	○	○	○	○	○
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23b. Describe the impact strong student support has on post-school outcomes.

Strong student support implemented in secondary transition programming has a positive impact on post-school outcomes for students with disabilities in my school/cooperative setting. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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24. My corporation/cooperative utilizes strong transition program planning for students with disabilities.

- ☐ Yes (1)  
☐ No (2)  
☐ Do Not Know (3)

24a. Describe the effectiveness of offering a strong transition program.

Strong transition programs are effectively implemented in secondary transition programs offered to students with disabilities in my school/cooperative setting. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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24b. Describe the impact a strong transition program has on post-school outcomes.

A strong transition program implemented in secondary transition programming has a positive impact on post-school outcomes for students with disabilities in my school/cooperative setting. (1)	○	○	○	○	○
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25. My corporation/cooperative utilizes vocational education as part of secondary transition program/services.

- ☐ Yes (1)  
☐ No (2)  
☐ Do Not Know (3)

25a. Describe the effectiveness of offering vocational education.

Vocational education is effectively implemented in secondary transition programs offered to students with disabilities in my school/cooperative setting. (1)	○	○	○	○	○
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25b. Describe the impact offering vocational education has on post-school outcomes.

Vocational education implemented in secondary transition programming has a positive impact on post-school outcomes for students with disabilities in my school/cooperative setting. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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26. My cooperation/cooperative utilizes work study programs as part of secondary transition program/services.

- ☐ Yes (1)  
☐ No (2)  
☐ Do Not Know (3)

26a. Describe the effectiveness of offering work study programs.

Work Study programs are effectively implemented in secondary transition programs offered to students with disabilities in my school/cooperative setting. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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26b. Describe the impact offering a work study program has on post-school outcomes.

<p>A work study program implemented in secondary transition programming has a positive impact on post-school outcomes for students with disabilities in my school/cooperative setting. (1)</p>	○	○	○	○	○
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27. My corporation/cooperative emphasizes students with disabilities passing an exit exam and/or obtaining a high school diploma as part of secondary transition program/services.

- ☐ Yes (1)  
☐ No (2)  
☐ Do Not Know (3)

27a. Describe the effectiveness of emphasizing an exit exam/high school diploma.

<p>Being able to pass an exit exam and/or obtain a high school diploma is effectively implemented in secondary transition programs offered to students with disabilities in my school/cooperative setting. (1)</p>	○	○	○	○	○
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27b. Describe the impact passing an exit exam and/or obtaining a high school diploma has on post-school outcomes.

Passing an exit exam and/or obtaining a high school diploma implemented in secondary transition programming has a positive impact on post-school outcomes for students with disabilities in my school/cooperative setting. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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#### Section VI: Focused Questions and Open-ended Response

This section is designed to explore your perceptions related to key evidenced-based transition predictors utilized in successful transition programs for students with disabilities and potential barriers to implementation. Please indicate what you believe to be true in answering these open-ended survey questions.

1. What are the barriers to implementing inclusive practices in general education for students with disabilities at the secondary level?
2. What are the barriers to implementing paid employment/work experiences for students with disabilities at the secondary level?
3. What are the barriers to facilitating/supporting high parental involvement for students with disabilities in support of transition programming at the secondary level?
4. What are the barriers to teaching self-determination skills for students with disabilities in transition programming at the secondary level?
5. What are the barriers to teaching self-care/independent living skills for students with disabilities in transition programming at the secondary level?

*Appendix H*

## Indiana Special Education Roundtables

